THE LANCET.

VOL. II.] LONDON, SATURDAY, MAY 28, 1842. [1841-42.

A COURSE OF LECTURES ON SYPHILIS.

DELIVERED AT THE SCHOOL OF MEDICINE, GROSVENOR-PLACE, ST. GEORGE'S HOSPITAL, SESSION 1841-42.

BY SAMUEL LANE, Esq.,

Lecturer on Anatomy and Surgery, and formerly House-Surgeon of the LOCK HOSPITAL, LONDON.

LECTURE XI.

The resources inherent in the animal frame by which poisonous substances may be eliminated from the blood.

The organs of excretion preserve life by preventing the injurious accumulation of noxious principles which are continually entering the blood with the food we eat and with the air we breathe: it is equally their office to remove poisonous substances which, through any other channel, may have become mixed with the blood. The familiar instance of intoxication by alcoholic drinks. Experiments in which recovery has followed the injection of extraneous matters into the blood-vessels.

Can poisons be prevented from entering the circulation when applied to the living tissues? The laws regulating the physiological actions of poisons when existing as active agents in the blood; first, they act in the direct ratio of their quantity; second, each produces its distinct and specific effect; third, a certain but varied period of latency is proper to each.

The animal poisons are the most varied and complicated in their habits; contagious; infectious and contagious; capable of reproducing themselves; of rendering the system unsusceptible of future attacks; of affecting one species of animal only; of affecting several.

The syphilitic poison, in particular, transferrible by inoculation; capable of reproducing itself; not infectious; followed by a secondary and tertiary series of symptoms; these latter not communicable by inoculation; the system susceptible of any number of attacks: the interval between the insertion of the poison and its reproduction in the inoculated part; the periods at which the secondary and tertiary symptoms make their appearances.

GENTLEMEN,—In my last lecture I brought before you numerous experiments, which appeared to me to establish the important fact, that all poisons affect the general system through the medium of the blood, and not through "the sentient extremities of the nerves." I explained to you how we might account on this hypothesis for the *rapidity* with which certain poisons produced their fatal results, the velocity of the circulation being equal to that of the most rapidly-fatal poisons; and I endeavoured to show you, as deduced from our recently improved knowledge in chemistry, that the entire fibrin, or any other essential element of the blood, might be decomposed by the addition of a *very minute quantity* of poisonous matter.

The fibrin contained in the thirty pounds of blood of the adult human body being only 392 grains, and its combining number being as high as 8788, a grain of any substance whose combining number was not higher than 22, might deprive the blood of the whole of its fibrine. Neither the velocity, then, of the action of a poison, nor the smallness of the quantity required to produce its fatal effect, oblige us to have recourse to the nervous system to explain the phenomena. I also drew your attention to the fact, that certain animal poisons, when introduced into the blood, would induce a change in this fluid somewhat analogous to that produced by the addition of yeast to vegetable juices containing sugar and gluten, by which a greater quantity of a similar matter would be generated, capable in its turn of causing the same series of changes under like circumstances.

I now proceed to address you upon a question of equal importance, namely, What are the resources possessed by the animal

frame to free itself of deleterious and poisonous agents acting upon the general system through the medium of the blood? It will be evident to you that whatever these may be, it will be the duty of the surgeon to bring them into play to the full extent compatible with the healthy and ordinary functions of the body.

This question has a wider scope than at first appears. Allow me to remind you, that materials are continually entering the blood for the purposes of nutrition with the air we breathe and with the food we eat, which, if allowed to accumulate, would prove destructive of life; but many of our organs are framed for the express purpose of separating these matters as fast as they are formed, so that under ordinary circumstances, while the functions of these organs remain perfect, the blood is kept pure. These are the excretory organs; the principal of which are the kidneys, the liver, the mucous membrane of the bowels, the skin, the lungs. Whenever the excretory functions of these organs are stopped, illness is the consequence; and although they aid each other by taking on what is called a vicarious action, yet if the function of some of them be entirely arrested, death will shortly be the consequence: for instance, when the kidneys or the liver, either from disorganisation or from whatever cause, refuse to eliminate their excretions, the blood no longer circulates pure to the brain, but mixed with the elements of urine or of bile, and the person dies with head symptoms, or, in other words, from a poisoned brain. The other structures, of course, are similarly circumstanced, but the brain is more readily affected by these impurities.

The most familiar example we have of poisoned blood becoming purified by the emunctories, is when fluids containing alcohol are indulged in to excess. The nervous system being poisoned by the alcohol contained in the circulating blood, performs its functions very imperfectly, and the well-known symptoms of intoxication are established. Were there no provision for removing the alcohol from the blood, the man who once became intoxicated would have always remained so, but fortunately after the stomach has rejected its contents, the kidneys, the skin, the lungs, and probably other excretory organs lend their aid, and the blood is soon purified of the deleterious agent, a headach and loss of appetite alone remaining on the following day, to remind him of his debauch.

But one or two instances in which extraneous matters have been purposely injected into the blood-vessels, and where recovery has taken place without the aid of remedies, will show more distinctly the powers which spontaneously develop themselves in the animal system before the poison is entirely eliminated from the blood, and the health restored. We must, of course, be careful to distinguish between the injurious symptoms produced by the poison, and the salutary, though perhaps violent, efforts set up in the system, in order to expel it. Gaspard * injected an ounce of saliva into the jugular vein of a dog: this was soon followed by evacuation of urine, afterwards of fæcal matters, then vomiting; and ultimately depression, inertia, dyspnœa, and slight fever; but after three hours the appetite returned, and the animal was perfectly well the next day.

Half an ounce of bile from a calf was also injected by the same experimentalist into the jugular vein of a dog; some minutes afterwards an abundant secretion of clear urine took place, then two liquid alvine dejections. No further disturbance of function was observed.

One ounce and a half of human urine was transfused into the jugular vein of a large dog. This was followed in three hours by an abundant alvine evacuation, and in half an hour another more copious, accompanied by an enormous discharge of urine; after which the animal completely recovered.

Two drachms of fœtid pus from a large ulcer were injected into the jugular of a dog; instant agitation and gulping ensued; then great prostration, moaning, and repeated vomiting during the day: towards evening the respiration became scarcely perceptible; the pulse was feeble, the paws extended. Ten hours after the operation, blackish liquid, extremely fœtid evacuations took place, which gave immediate relief, and the recovery was complete on the following day.

You will observe, then, that it is by the agency of the excretory organs, or emunctories, that these poisons are to be got rid of. In the treatment of syphilis the surgeon must, therefore, solicit their active co-operation, and when he considers the remedies which have been ascertained to possess the greatest influence in the disease under our consideration, he will find that they are such as act most powerfully and generally on the secretions, such as mercury, the hydriodate of potash, guaiacum, sarsaparilla, &c. With this view of the subject he will have no difficulty in understanding how in the healthy state of the organs of excretion the poison of syphilis may disappear without the aid of any remedial means. He will be prepared to stay his hand in the administration of these active agents, especially mercury, before he runs the risk of producing worse results than would have followed the disease itself. It will be manifest to him that mercury is not only not the sole specific, but that it is no specific at all, and is beneficial simply upon the same principle as other remedies, which act perhaps less energetically upon

* Ancell's lectures on the blood, LANCET, 1839-40, p. 474.

the same system of organs; and when salivation is produced by the action of mercury, he will see why the poison should be more quickly eliminated from the system than when it acts only upon the kidneys, liver, bowels, and skin, the salivary glands being an additional emunctory brought into extraordinary activity for the purpose.

Dr. Christison, in his valuable work on Poisons, holds the opinion that they produce their effects through the sentient extremities of the nerves; consequently he scarcely alludes to the benefit to be derived from acting on the emunctories in the treatment of poisoning. The antidotes, he says, are of two kinds: "One kind takes away the deleterious qualities of the poison, before it comes within its sphere of action, by altering its chemical nature; the other controls its poisonous action after it has begun, by exciting a contrary action in the system. In the early ages of medicine almost all antidotes were believed to be of the latter description, but, in fact, very few such antidotes are known." As instances of the former kind of antidotes, he mentions magnesia and chalk for the mineral and oxalic acids, albumen for corrosive sublimate and verdigris, bark for tartar emetic, common salt for lunar caustic, vinegar and oil for the fixed alkalies, &c.; and in reference to the latter, he says, "it appears probable that the remote operation of lead may be corrected by mercury given to salivation, and that the violent salivation caused by mercury may be corrected by nauseating doses of antimony;" that "ammonia is to a certain extent an antidote for hydrocyanic acid, but by no means so powerful as some persons would have us believe." These modes of treatment, you will perceive, are but little applicable to the syphilitic poison; if we except that this poison, as an animal fluid, may be locally decomposed, either by acids or alkalies, as well as by many other chemical agents; and in our topical applications, this is a consideration which, it appears to me, has been too much overlooked. If, for instance, we could decompose the poison as fast as it was locally formed, according to the views of most pathologists, we should effectually prevent the occurrence of the secondary symptoms.

With respect to many animal poisons, it becomes a question of considerable importance, whether the entrance of the poison into the circulating blood can be prevented, after it has been once placed in contact with the living tissues. We have seen that a poison applied in a fluid state is absorbed, and produces its effect with extraordinary rapidity; we must conclude, therefore, that when the quantity has been sufficient, our endeavours to arrest its entrance into the circulating current will generally prove unavailing. The sucking of a poisoned wound, the application of a cupping-glass over it, or of a ligature around the limb, must be instantaneous to be effectual; and although they may succeed in our experiments, will not be found practically useful. Are we never, then, to excise parts bitten by a rabid animal, or to remove a portion of the prepuce on which a recent chancre is situated? Are we never to expect to annihilate the poison of syphilis recently applied, by the use of the lunar caustic, or other escharotics? Certainly not, if the full dose of the poison required to produce the usual train of constitutional symptoms in these diseases be at once absorbed, as is the case perhaps with the poison of the viper. But if, as I imagine we must admit, at any rate as regards syphilis, the quantity inserted has only been sufficient to cause locally a reproduction of the same poison, and it is by the absorption of this newly-generated poison that the constitution becomes affected, then the greatest advantage will result from the excision or destruction of the poisoned parts; and probably those chemical agents will be found most effectual which not only destroy the animal tissues, but also completely decompose any animal fluid, whether poisonous or healthy, with which they come in contact. But as I am about to enter more fully into the consideration of the action of poisons in general, and of the syphilitic in particular, on the human body, these important practical questions will receive further elucidation as we proceed.

Poisons have been divided into the animal, vegetable, and mineral; and certain general laws have been observed to regulate their actions upon the animal body. I have already shown you that they all enter the blood before they produce their effects, and that they can only be separated from the blood, under ordinary circumstances, by the organs of excretion.

I have now to explain to you the phenomena which have been noticed to attend their physiological actions while existing as active agents in the blood. As Dr. Robert Williams has observed, in his admirable remarks on morbid poisons, in the first volume of his "Elements of Medicine," our knowledge of the action of medicinal substances on the animal economy, will furnish us with the fullest information with respect to the general laws regulating the action of poisons.

In the first place, we observe that they act in the direct ratio of their quantity, modified by the age, vigour, temperament, or idiosyncracy of the person. There may, perhaps, be an exception to this rule, when a poison acts by entering into chemical combination with some constituent of the blood, with which it may unite only in a definite proportion; so that all beyond the requisite quantity would be inert. Some medicaments, calomel, for instance, and tartar emetic, certainly do not appear to act with activity apportioned to their dose. I have seen calomel given in scruple doses produce but

little more effect than the more ordinary one of five grains. Tartar emetic administered in six-grain doses, three times daily for six weeks, I have witnessed to be followed by no appreciable results in Laennec's practice; the increased flow of mucous excited by the presence of these stimulating substances may probably account for this. Alcohol, tobacco, and opium, offer us other instances in which enormous doses may be taken, by degrees, with but little comparative effect. The organs which are poisoned by these substances, it is said, are enabled to accommodate themselves *by habit* to their presence, and probably the emunctories gain more power to eliminate the poisons.

Secondly. They have all certain definite and specific actions; some on one organ or tissue, some on several. Aloes acting on the mucous membrane of the intestine; digitalis on the heart; opium on the brain; antimony as a diaphoretic, emetic, and cathartic; mercury on the kidneys, skin, intestinal canal, and salivary glands; the poison of typhus fever acting upon a still wider range of organs; and these effects remain constantly distinct in character if not in degree: for although classes of poisons may resemble each other in action, hence their classification into cathartics, diuretics, &c., you cannot substitute opium for aloes, or aloes for digitalis.

Thirdly. Poisons require a certain time to manifest their effects on the system, or are said to have a period of latency: this varies considerably, however, with respect to different poisons; some acting almost instantaneously; others requiring days, weeks, or months, before their phenomena are to be observed. Hydrocyanic acid, the poison of the viper, the woorara poison, act in a few seconds; ipecacuanha may require ten minutes to produce its emetic effect; colocynth as many hours before it produces catharsis; opium may not be followed by its narcotic effects for two hours; digitalis, colchicum, and mercury, require several days to produce some of their peculiar effects on the system; in these latter instances the medicine is said to become cumulative before its action is induced. These differences in the periods of latency are more apparent than real, and may be explained, as regards medicines taken into the stomach, by the assimilating power of this organ, and by the delay occasioned to the entrance of the substance from its want of perfect solution and adaptation to permeate by endosmosis the coats of the blood-vessels or the lacteals. I believe that all poisons, if introduced into the blood in sufficient dose to produce their effects, would do so in much less varied periods than is at present supposed. What has been termed period of latency, I should designate deficiency in quantity in many instances, especially in the animal poisons. I am disposed to consider in small-pox, in syphilis, and even in hydrophobia, that the poison enters the blood in minute and harmless quantities, which become cumulative before their specific effects are manifested; and that the period required for such accumulation is the measure of what has been considered their period of latency. The bite of the viper acts instantaneously, because the quantity introduced at the instant is sufficient to produce the peculiar effects of that poison; but if that same quantity were diluted in twenty drops of water, and were only permitted to enter the blood in the proportion of one drop per day, supposing the emunctories capable of removing this quantity in this period, of course no symptoms would appear: but if unequal to this task, as soon as the poison had accumulated in the blood to a sufficient amount to disturb the animal functions, indications of its presence would be evidenced, and the period of latency would have terminated. Such I believe to be the explanation of the latency of all the animal poisons, and I would say that in syphilis, in small-pox, in hydrophobia, in glanders, in measles, scarlatina, &c., the matter first introduced is not sufficient to produce any marked disturbance of the system, but simply to cause a reproduction of the same poison by which the system is afterwards, sooner or later, to be affected.

The general laws, then, regulating the actions of poisons, whether animal, vegetable, or mineral, on the animal economy, we have stated to be, 1st. That they act in the direct ratio of their quantity. 2ndly. That each produces its distinct and specific effect. 3rdly. That a certain but varied period of latency or of inertness is observed proper to each. But each class of poisons has certain habits peculiar to itself, which I must now proceed briefly to notice.

Animal poisons are the most varied and complicated in their habits; some are found to be contagious only, as syphilis, cow-pox, gonorrhœa, glanders, &c.; others are contagious and infectious, as the small-pox, scarlatina, measles, typhus, &c. Some few can only be propagated by the species of animal in which they arise spontaneously, as we see exemplified in hydrophobia and in the venom of the viper, although animals of another species when bitten by them die of the poison. A dog, cat, or wolf, for instance, when rabid, can always transfer the disease; but a man, a sheep, or a horse, though susceptible of hydrophobia themselves, cannot, it appears, communicate it to others. The cow-pox and glanders, on the other hand, may not only be transferred from the species of animal in which they originate to others of a different species, but may be again propagated from them. Some poisons are confined to one species; for instance, syphilis, scarlatina, small-pox, measles, are peculiar to the human species, no other animal, as far as we know being liable to these diseases. Again,

certain animal poisons when once they have invaded the system, leave it altogether, or, at any rate, for a considerable period, unsusceptible of a second attack, as is the case with cow-pox, small-pox, measles, scarlatina. While in syphilis, in the dissecting-room poison, the venom of the viper, the susceptibility is unchanged by any number of previous attacks.

With respect to cow-pox and small-pox we observe the remarkable fact, that either will exhaust the susceptibility of the system to both these poisons. If we should hereafter discover that some other poisons also possess this property in reference to each other, I will venture to predict that it will not be in syphilis, in the dissecting-room poison, in the bite of the viper, or in the poison of erysipelas, for the constitution remaining as susceptible as ever to these poisons after any number of previous infections, shows that the material upon which the poison acts is continually being reproduced, and probably cannot be removed without causing death. But in scarlet fever, measles, chicken-pox, as well as small-pox and cow-pox, the materials upon which the poison feeds seem capable of being removed without danger to life; and if by any medicament or less dangerous poison we could eliminate them from the blood, perfect immunity would be attained. This is a practical inference, which it appears to me is fairly deducible from the study of the habits of these two classes of animal poisons, and which at some future period may happily lead to an analogous discovery to that of Dr. Jenner with respect to other poisons, which, like small-pox or cow-pox, exhaust the system of its susceptibility to future infections.

Mr. Hunter conceived that no two poisons could produce their effects on the same individual at the same time; consequently, if you placed the system under the influence of one poison, you superseded, or, at any rate, arrested the progress of any other with which the blood might be contaminated. Gonorrhœa and chancre being present in one individual at the same time, would not appear to Mr. Hunter to disprove this position, as he considered them to arise from one and the same poison, acting upon different tissues, producing an ulcer when applied to the skin, and a purulent discharge when applied to mucous membrane. It was on this principle that he explained the action of mercury in the cure of syphilis; and many phenomena accompanying disease, seem at first sight to bear out this opinion. Measles, for instance, has been known to arrest hooping-cough: small-pox and cow-pox have been noticed to produce the same effect. Dr. Adams mentions the fact of children being brought to him during the prevalence of hooping-cough to be vaccinated, under the impression that the vaccination would arrest the disease, and he states that it frequently succeeded.

Mr. Oaks* relates an instance of a very severe case of hooping-cough being entirely put a stop to by the inoculation of small-pox; but a wider range of observation has shown that these same poisons, as well as others, will coexist. Small-pox, measles, and hooping-cough, have been seen to run their course together: not unfrequently one disease is succeeded by the action of another, and returns after its cessation. Gonorrhœa, for instance, is frequently suspended on the accession of fevers, but generally reappears after the subsidence of the latter. Small-pox and cow-pox introduced into the system at the same time, have been known in some instances to run their course separately; in others, to coexist and run a simultaneous course; and, thirdly, one to supersede the other entirely. The position, therefore, that one poison cannot coexist with another is not tenable; at the same time we must admit that one poison is greatly modified by the presence of another.

There is a class of poisons nearly allied in their habits to those we have just considered under the term of animal poisons, which reach the blood with the atmospheric air. They are supposed to emanate principally from putrid animal or vegetable matters, and to be mixed with the atmospheric air in the form of gas or vapour; they include the miasmata or putrid exhalations. They appear to contaminate the entire mass of blood, and to leave the patient when recovery takes place, less susceptible of the same poison, at any rate for some period. They are not accompanied by cutaneous eruptions properly so called, although petechial spots occasionally present themselves. Under this head may be enumerated all continued, intermittent, and remittent fevers, cholera, influenza, dysentery, &c.

The vegetable and mineral poisons are much more simple in their habits; they are incapable of reproducing themselves, and act more directly in the ratio of their quantity; they are neither infectious nor contagious. The mineral are to a greater extent under the control of the chemical antidotes. The vegetable are more liable to modification by the digestive function, added to which the system has more power of accommodating itself to the continued use and increased dose of the latter, as we see well exemplified in the abuse of tobacco and of opium. But the action of the stomach upon poisons is carried to the fullest extent in the class of animal poisons, some of which appear to be entirely decomposed, and rendered inert when subjected to the action of this organ. Mr. Hunter relates an instance of the poison of syphilis being accidentally

* Dr. Williams's Elements of Medicine, p. 304, vol. i.

swallowed without producing any disturbance of the health; and it is well known that a small bird may swallow the poison of a viper with impunity, which, if inserted by a wound, would have proved instantly fatal.

Having given you a brief outline of the laws regulating the action of poisons in general upon the animal economy, I shall now confine my observations to the laws and habits peculiar to the syphilitic poison, illustrated, however, by a comparative view with the poisons of small-pox and cow-pox.

In former lectures I have explained to you my opinion with respect to the history and origin of this disease, which, as it differs materially from that usually received, I shall here repeat; viz., that the venereal disease existed centuries before the siege of Naples, not only in South America, but in all parts of the world wherever sexual intercourse, unrestrained by religion or the customs of society, was carried to great excess, that it first originated; and, could we destroy the whole of the existing virus, would again appear under similar circumstances.

Syphilis is one of the contagious animal poisons transferrible by inoculation, capable of reproducing itself like small-pox or cow-pox, followed, as in these diseases, after a certain interval, by a primary effect at the point of insertion of the poison, and at a subsequent period by secondary or constitutional symptoms, which in syphilis affect the skin, the throat, the eye, the nose, the palate, the fibrous and the osseous tissues. In the small-pox and cow-pox the secondary or constitutional effects are confined to the tegumentary membrane, and resemble precisely both in appearance and in contagious property the primary focus of the poison; but in syphilis the secondary or constitutional affections differ widely not only in external characters from the chancre or primary local symptom, but they have lost the characteristic property of transmitting the disease by inoculation. Syphilis, like small-pox and cow-pox, having passed through its different stages, will disappear spontaneously; the system, however, in syphilis is left as susceptible as ever to future attacks.

The secondary symptoms of syphilis, though not transferrible by inoculation, are communicable through the blood of the mother to the fœtus in utero; one form also of the secondary disease, namely, condylomata or mucous tubercle, appears to possess the power of spreading the disease, if not by inoculation, by contact of surfaces, and thus holds an intermediate position in its characters between the primary and secondary affections; or this peculiarity may be considered as presenting a still greater point of resemblance between the laws regulating the poison of syphilis and those of small-pox and cow-pox, in which latter the matter resulting from the secondary disease is precisely similar to that which has been originally inserted.

In syphilis the secondary affections do not necessarily and invariably succeed the primary; the average number of cases in which they do present themselves, where no mercury has been administered, appears to be about one case in ten, and where this remedy has been had recourse to not more than one in seventy-five.* The entire succession of the secondary symptoms, as above enumerated, is extremely rare, the ordinary run of cases only presenting the affections of the skin and throat, accompanied, perhaps, by pains in the limbs. The bones and fibrous tissues usually escape, especially where no mercury has been given.

In small-pox the secondary eruption is almost invariable, although the quantity of the pustules varies much in different individuals. In cow-pox, on the contrary, they very rarely occur. In the two latter diseases the period which intervenes between the appearance of the primary and secondary pustules is much shorter and less subject to variety. In syphilis great irregularity will be observed in this respect; and treatment, especially by mercury, will be found to possess a considerable influence over the period at which these symptoms occur, and will frequently entirely prevent them. Certain of the secondary syphilitic affections are generally associated together, as the pains, eruptions, and ulcers of the throat, to which is occasionally added iritis: a considerable interval is usually found to intervene between the above-mentioned affections and those of the bones and joints, so much so that some pathologists have termed these latter the tertiary symptoms of this disease; another reason for so classifying them is founded upon the notion that the former can alone be transmitted by the mother to the fœtus in utero. This, however, is not established, for Merkling† mentions a case in which the fœtus, examined in utero post-mortem, was found to be affected with secondary syphilis, and the bones presented in various parts osseous projections. The mother was labouring under secondary symptoms at the time of her death, which occurred suddenly from accident.

The affections of the bones and joints, though forming a third order of symptoms, are frequently attended by those of the second series; these latter having been either persistent, or having reappeared after a first subsidence. So that, together with affections of the bones and joints, ulcerated throat, cutaneous eruptions, iritis, &c., will occasionally be present. It very rarely, however, occurs, that the third order of symptoms appear without having been preceded by the second.

The interval occurring between the insertion of the poison and its reproduction in the

* Bacot on Syphilis, p. 55.

† Bertin, Traité de la Maladie Venerienné, p. 514.

inoculated part in syphilis, is from four to seven days; longer or shorter intervals are to be looked upon as irregularities. Mr. Hunter mentions as extreme periods twenty-four hours and seven weeks: this latter period will probably be found to refer to the application of the poison to the sound cuticle, and not to its insertion into the living tissues, the abrasion of the cuticle upon which venereal matter may have been deposited being necessary to its absorption. The period of reproduction, or, in other words, the duration of the primary ulcer without reference to extreme cases, appears to be from thirty to forty days. The second series of symptoms usually make their appearance, if at all, in from six weeks to three months after the cessation of the primary; the tertiary affections of the bones and joints in from three to six months. The effects of the poisons of small-pox and cow-pox are more constant and determined in the periods of their appearance and duration, and are much less under the control of treatment than we find is the case in syphilis.

As the theory we adopt with respect to the action of any poison must have considerable influence over the therapeutical means we should recommend for its treatment, I shall offer a few remarks on this head before I proceed to the practical part of the course, which I propose to do in my next lecture.

REMARKS ON THE PATHOLOGY AND CAUSES OF CANCER.

By William Budd, M.D., Bristol.

[Being the substance of a Paper read before the Bristol Medical Society.]

(Continued from page 270.)

Having considered pretty fully the most essential points in the pathology of cancer, we are now prepared to enter upon the discussion of its causes. This, which is the most difficult, as well as the most important, point in the history of nearly all diseases, should generally, also, be the last to be considered, for the causes of most diseases act unseen, and can only be discovered by reasoning from their effects. This gives us the only trustworthy clue to guide us to their hiding-place: for until we know the nature of a disease, and the true character of the morbid element in which its essence consists, it would be vain to hope to speculate with success on its cause, since we do not yet know what the presumed cause will be required to account for.

The patient who is suffering from the coryza of iodide of potassium, attributes his disorder with the most implicit confidence to the influence of cold, and will name, without misgiving, the precise moment of exposure. The physician, who knows the real state of things, smiles at his error; but in other cases, where the physician shares in the ignorance of his patient, both make the same blunder. I must, therefore, beg you again to consider for a moment the characteristics of cancer, and the nature of the morbid element which represents the disease.

It must be borne in mind, that this element is an organised thing, essentially different in nature from the normal tissues of the body, endowed with independent powers of life, and only relying on the body for the materials of its subsistence. The independence of these powers sufficiently appears in this, that germs preserve them unimpaired when detached from the parent growth, and carried to distant parts of the organism; but it is still better proved by the fact, which now seems well established, that, under favourable circumstances, these germs may be transferred with the same effect from one organism to another.

Professor Langenbeck injected into the veins of a dog some pulp taken from a cancer that had just been removed from a living body. In the course of some weeks the dog began to waste rapidly: he was then killed, and on being examined, several cancerous tumours were found in his lungs. So many cases have occurred of cancer of the penis in men whose wives had cancer of the uterus, that many physicians have been led to believe that the disease in these cases was propagated by contagion. Professor Langenbeck's experiment gives colour to this opinion, and other facts leave little room to doubt its justness. In different parts of the same body contamination by contact often occurs without direct vascular connection.

Cancer is frequently propagated from the liver to the abdominal parietes by mere contact without adhesion. Why, therefore, may it not be sometimes communicated from one individual to another in the same way? All that seems to be required is, that the germs be deposited on a thin and delicate membrane well supplied with vessels; a condition which is perfectly fulfilled by the integument of the glans penis.

Now, while the facts just stated, and in particular the experiment of Langenbeck, prove beyond doubt the independent vitality of the germs of cancer, they also show that the lodgment of one or more of these germs in a single part is in itself, and independently of constitutional predisposition, sufficient to establish the disease. This I have already endeavoured to prove by other considerations, but here the fact is no longer questionable. Our inquiry now takes, therefore, a definite and limited form. What we have to account for is, the source or origin

of the first germ of the disease. The question is clear in its conditions, for the germ itself is an object of sight, and its nature and properties are known to us.

Two hypotheses at once offer themselves, and one or other of these must be adopted. It may be supposed either that the germ is introduced from without, in its proper form, and with full possession of its attributes, or that it is generated within the body, and of the materials of the body, under the influence of external or other agencies. Now, to the former supposition there is this great objection, that we know of no probable source external to the body from which such a germ could be derived, and in which it could have held its prior existence. There is, indeed, reason to believe, as already shown, that it may in some cases be directly implanted from disease in another individual; but by far the greater number of cancers originate under circumstances in which the idea of this source is quite precluded.

Numerous facts, indeed, point to another source, in many cases, of a widely different nature, and show that if the germs of cancer be always introduced from without, they must, in their first state, inhabit a very different medium from that of the living body, and have a very different mode of existence from that in which they are afterwards placed.

I shall presently state some facts, from which the inference seems unavoidable, that common soot, when applied to the skin for long periods of time, is an effectual cause of cancer. Under the supposition I am now discussing, therefore, this substance must contain the actual germs of the disease. Now, it certainly is very difficult to conceive that the cancerous element, as we know it in the living body, nourished with blood-vessels, and having all the characters of flesh, can also live and multiply in the soot of our chimneys.

There are great difficulties in the way of the supposition that the cancer-germs come from without. To some these difficulties will appear insuperable, and quite sufficient to exclude this hypothesis; but on further consideration this may not seem so certain: for we encounter exactly similar difficulties in the case of true parasitic animals. I may mention as an instance that of the cysticerci, which inhabit our muscles, and of still higher entozoa which infest our other tissues. Do we know the source from which *their* ova come, and how they first gain admission to the deepest recesses of the body? Do we even know a probable source, external to the body, from which they might be derived? To all these questions it must be answered in the negative. But notwithstanding this, few will be inclined to allow that these beings also originate within the body, under the influence of common agencies. Great, therefore, though the difficulty may be of conceiving the existence of the germs of cancer in external sources, and especially in such as those in which observation would lead us to seek them, this hypothesis may still, perhaps, be reasonably entertained, and reserved for the test of future inquiry; and the more so, because difficulties, almost equally great, stand in the way of the alternative. It is, in fact, very difficult to conceive that a thing so specific in its nature, and endowed with such remarkable properties as the germ of cancer, can be actually engendered from the mere normal materials of the body under the influence of common agencies. This, to say the least, is treading very close upon the heels of spontaneous generation: for to constitute that, what do we want more than the fabrication, without the aid of germ or ova, of an organised thing, definite in form, and endowed with independent powers of life and nourishment, and with the faculty of self-propagation. Large groups of beings are recognised by the naturalist quite as simple as the cancer-cell, both in form and in their mode of propagation. If, then, physical or any other agencies have power to cause the evolution of bodies such as these from the normal materials of the blood or tissues, it is, you will allow, a very remarkable prerogative. There are some, indeed, who do not find such difficulty in this.

Pus, they say, is a very simple case in point; for this, every one knows, may be produced at will by any common cause of irritation: but when its globules find their way into the blood, they soon cause, in distant parts, the formation of a new stock, by which their number is vastly multiplied. And, as this takes place with much less local vascular change than attends the formation of pus in common inflammation, its globules may fairly be supposed to multiply much in the same way as cancer-cells; and thus our difficulty seems to be resolved by a very simple and plain analogy. But on closer examination there is seen to be much difference between the two cases.

In the first place, pus, far from being, like cancer, a specific thing, and originating only under rare and special conditions, is the common product of almost every kind of irritation. That pus-globules should excite suppuration where they lodge, is not, therefore, at all remarkable, and certainly does not necessarily imply the fact of *breeding* in the same sense in which this must be understood of cancer-germs. Nor can pus be strictly considered an organised and living thing, as cancer certainly is; for, although the pus-globule has an organic form, yet it is not capable, like cancer-cells, of making part of living structures, having vascular connection with the body, and nourished like other tissues. This analogy being, then, after all, loose and incomplete, the difficulty, as first stated, remains in greater force.

An analogy less apparent at first sight, but which, in reality, meets the difficulties of the case more satisfactorily, is to be found in the characteristics of one of the normal constituents of the body, namely, the blood-globules; for these globules have this in common with cancer-cells, that not only do they exhibit living properties attached to an organised form circulating over the body, but they retain these properties even when transferred from one body to another, as in the case of transfusion.

Now, the first blood-globules in the embryo do not spring from others, so that, if the opinion which is gaining ground among anatomists should be ultimately established, that when once formed they have in their character of cells, and in common with development-cells in general, a power of self-propagation, their case would really remove some of the most serious difficulties in the way of the hypothesis under discussion, although others might still remain untouched by it. Is it possible that the cancer-cell may be a degenerated blood-globule?

Having considered the speculative objections to both suppositions, let us now see which best accords with observed facts. In carefully examining the circumstances under which cancer has been found to arise, we meet with two cases in which it originates, in evident and important connection with local conditions, affecting the part in which the disease makes its appearance. One of these has already been mentioned. It is the cancer of chimney-sweeps.

As only a small number of these men become affected with cancer, some pathologists have argued that the part which soot plays in the case is altogether secondary and unimportant, and that it only acts in giving a local development to a cancerous diathesis already existing in the persons affected. But this is a false mode of reasoning. It is not assumed here that soot is an *infallible* cause of cancer; but that it may be regarded as a real and effectual cause, is clearly shown by the fact, that the number of chimney-sweeps who become affected with cancer is vastly greater in proportion to their own body than that of other men, to the whole male population of the same ages; for of this fact there is no doubt. But the real efficacy of soot as a cause is, perhaps, still better shown by the fact, that persons who have been long in the habit of handling it are very liable to get cancer in the hands. A very interesting instance of this is recorded by Mr. Travers. A man was admitted into St. Bartholomew's with cancer of the right hand; Mr. Earle, under whose care he was placed, was so forcibly struck with the exact resemblance of the disease to sweep's cancer, that he was at once convinced that soot must have had something to do with bringing it on. On inquiry, it turned out that the man was a gardener, and that for many years he had been in the constant habit of handling soot, while spreading it over his beds in the way of manure.

The other case, to which I just now referred, is that of the connection of cancer of the penis with congenital phymosis. The reality of this connection may, I think, be shown on the same grounds as those brought forward in the former case: for, from what I have myself seen, I have not the least doubt that persons with congenital phymosis become affected with cancer of the penis in vastly greater proportion than other men. Now these two cases, and especially the latter, certainly tell much in favour of the second hypothesis, that the first germ of cancer is bred in the body: for, while it is not easy to see what phymosis can have to do with supplying cancer-germs from without, it is not difficult to conceive that in this case the retention of acrid secretions, and in the case of chimney-sweeps the prolonged application of soot may cause that specific kind of irritation which we may suppose to be required to develop the first germ of the disease by a special morbid process. But cancer also originates in other circumstances still more in favour of the doctrine that its first germ may be formed by a process of this kind.

Cancer not unfrequently appears as a family complaint. Instances are known in which several children of one family have fallen victims to the disease. Now, while it is very difficult to understand how the mere fact of relationship should cause in several individuals the introduction of cancer-germs from without, it is very easy to see that it may effectually dispose them to the formation of the same morbid products. Instances of this are common enough in tubercle and many other diseases.

On the whole, then, it appears that the evidence at present greatly preponderates in favour of the doctrine that the first germ of cancer is not introduced from without, but is evolved within the body by a special morbid process. Some will, no doubt, think this evidence conclusive. I have laid it before you fairly, and I leave you to decide for yourselves. For my own part, considering the peculiar difficulties of the subject, the minuteness of the object whose origin we seek to discover, and the proportionate difficulty of obtaining certain evidence regarding it, I think it more philosophical to reserve our judgment for the "fiat" of future discovery. If I am not deceived, you will find in the remarks I have had the honour to offer you this evening, sufficient motives for this reserve. At all events, I shall be perfectly satisfied if in this rapid sketch I have brought into view the full scope and importance of the subject we have been considering. Closely connected from the first with that relating to the origin of contagious diseases, and at length identified

with it, we have also seen how nearly it touches the high and mysterious question of spontaneous generation.

These several questions may, indeed, all be summed up in this one, whether or not, and under what limitations, things specific in their nature, and which multiply by propagating their own kind, may also be engendered in other ways. This great question, in one form or another, is at this time powerfully agitating the minds of scientific men. Under the influence of discussion our conceptions of its conditions are gradually clearing up, so that we may hope that here, as in other subjects, this period is the prelude to discovery.

22, Park-street, May, 1842.

CASES ILLUSTRATIVE OF THE PATHOLOGY OF DISEASE OF THE HEART.

To the Editor of THE LANCET.

SIR,—I beg leave to transmit the following cases in illustration of the pathology of cardiac disease. My object in this paper is not only to show the connection between the physical and rational signs and the organic lesions, but to point out the morbid changes in other organs, especially in the lungs, liver, and brain, which are almost invariably found to accompany derangement of structure in the chief organ of the circulation. I remain, Sir, your obedient servant,

R. H. SEMPLE, Surgeon.

Islington, May 5, 1842.

CASE 1.—*Disease of Mitral Valves; Hypertrophy; Pulmonary Hæmorrhage; Meningitis.*

Jane P., ætat. 34, formerly a shoebinder, has been married sixteen years, has borne six children, and has generally enjoyed good health; has never suffered from any attack of rheumatism. For the last two years, however, she has been troubled with a slight cough, and six months ago she was attacked with violent shivering, with increase of cough and spitting of blood. A month after this attack the menses ceased, and they have not since returned; about the same time also anasarca began to appear, the swelling commencing in her thighs, proceeding downwards to her legs and feet, and, lastly, appearing in her belly. She was attended by a medical gentleman, and at first derived some benefit from the medicines prescribed; she, however, subsequently became worse, and was admitted into the Islington Infirmary April 21, 1842. At the time of her admission she presented the following symptoms:—The face is rather plump, and there is some colour in the cheeks, but the lips are purple and the eyelids œdematous; the arms are emaciated, and there are numerous livid marks upon the hands and fingers; she lies on her right side and breathes with difficulty, the muscles of the neck being called into action at every inspiration; she does not sleep well in general, and attributes her restlessness to cough, and the weight and inconvenience of the dropsical effusion. The feet, ankles, legs, thighs, and labia, are enormously distended with fluid, and pit upon pressure; the abdomen is also greatly distended, the distention rising above the ensiform cartilage of the sternum; there is distinct fluctuation felt in the abdomen between the pubes and a line drawn six inches above the umbilicus, but above this line percussion gives a tympanitic sound; urine scanty, turbid, of a dark red colour, and depositing a copious sediment; pulse 128, very weak and thready, but not irregular; bowels confined; tongue rather white; appetite good; some thirst. She has a little hacking cough, not attended with expectoration.

Physical Signs.—Percussion gives a clear sound beneath the clavicles, but the precordial dulness is heard over a much greater space than usual; on laying the hand over the region of the heart, the action of that organ can be distinctly felt accompanied by a thrilling tremor.

Auscultation.—Action of the heart very strong, lifting up the stethoscope, and perceived over a great extent to the right of the sternum. A loud bellows-murmur accompanies the first sound of the heart, prolonged into and obscuring the second sound, which is sharp and clicking. This murmur is heard most distinctly towards the apex of the heart, though it is impossible to apply the stethoscope directly to the apex, in consequence of the great distention of the abdomen which encroaches upon the thoracic region; no bellows-murmur in the carotids; sibilant, sonorous, and mucous rhonchi heard in various parts of the chest, but not very loud.

The diagnosis was disease of the mitral valves with hypertrophy and dilatation. The prognosis was necessarily unfavourable. She had a strong desire to be tapped, and it was determined that the operation should be performed in a day or two, not with the hope of materially improving her health, but to relieve her of some of the more urgent symptoms of the disease. In the mean time she was ordered milk and broth daily with a little meat, and the following medicines:—

℞ *Jalap powder;*
Bitartrate of potash, aa, ʒj.

To be taken immediately.

℞ *Tincture of digitalis*, m. v;
Solution of iodide of potassium, m. xx;
Mint water, ʒj.

The draught to be taken every four hours.

23. No better; bowels not open; has made very little water, which is of a dark

red colour, and very turbid; slept very little last night; pulse very feeble.

℞ *Castor oil*, ℥ss;
Croton oil, gtt. j.
To be taken immediately.

24. Bowels have been relieved, but there is no material alteration in the symptoms. To continue the mixture, together with the following:—

℞ *Elaterium*, gr. ½;
Colocynth pill, gr. iij.
A pill to be taken every four hours.

25. Has had one motion after each pill, but the stools are not watery. In all other respects she continues in the same state.

26. Paracentesis of the abdomen was performed, and eleven quarts of thin straw-coloured fluid were removed. She bore the operation well, and seemed relieved by it. She was ordered three glasses of port wine.

Seven, p.m., same day. Feels very weak, but is not in any pain; complains of great difficulty of breathing and want of sleep; pulse very feeble; action of the heart strong, heard over a great space, and accompanied by prolonged bellows-murmur, heard chiefly at the apex. She was ordered another glass of wine and the following draught:—

℞ *Tincture of opium*, m. xx;
Mint water, ℥j.
To be taken immediately.

27. Has slept well, and says that she feels better. There is still great difficulty of breathing; pulse 136, very feeble; respirations 40 in the minute; bowels confined; has passed very little urine; abdomen tympanitic; she has spit a considerable quantity of blood, which is in clots, and of a dark colour. She was ordered two glasses of port wine every day, and the following draught:—

℞ *Tincture of squills*, m. xx;
Epsom salts, ℥ss;
Infusion of senna, ℥j.
To be taken every four hours.

28. Feels worse; bowels have not been open; no sleep; has vomited some dark thick matter, which appears to be blood acted upon by the gastric juice; has also spit a large quantity of florid blood mixed with froth. To take ℥ss of castor-oil, and the following:—

℞ *Tincture of digitalis*, m. v;
Epsom salts, ℥ss;
Infusion of senna, ℥j.
The draught to be taken every four hours.

29. Much the same as yesterday; has again spit a large quantity of dark-coloured blood; complains of great difficulty of breathing and tightness of the chest with palpitations.

Physical Signs.—Action and sounds of the heart the same as those above described. Percussion of the dorsal region gives a dull sound over the thorax on each side of the vertebral column; muco-crepitant rattle heard extensively in the same regions, and bronchial respiration on the right side.

Diagnosis. — Pulmonary hæmorrhage, which was distinguished from pneumonia (which it very much resembles in its physical signs), by the character of the expectoration. As it was considered useless to adopt any active measures, she was ordered to apply a mustard poultice to the epigastrium, to relieve the urgent dyspnœa, and to take the following:—

℞ *Dilute sulphuric acid*, m. v;
Epsom salts, ℥ss;
Infusion of roses, ℥j.
The draught to be taken every four hours.

30. Appears to be sinking; has again spit a large quantity of very dark blood. A spot of sphacelus has appeared over the sacrum.

She died on the 1st of May at ten, a.m, having been delirious during the preceding night.

Post-mortem Examination Forty-five Hours after Death.

The legs were anasarcous; the abdomen tympanitic; a quantity of bloody fluid flowed from the mouth. The parts of the body not infiltrated with fluid were emaciated.

Head.—The scalp, skull, and dura mater, presented no morbid appearance. The arachnoid membrane was inflamed, and its minute vessels injected; it was thickened in a few places, but was in general easily torn and separable from the pia mater and from the convolutions. A considerable quantity of thin serous fluid was found between the layers of this membrane on the surface of the brain, in the ventricles, and in the vertebral canal. The substance of the brain presented no peculiar appearance, except that some parts appeared to be of softer consistence than the rest.

Chest.—The cavity of the pleura on the right side contained more than a quart of thin bloody serum, probably poured out shortly before death, as there were no adhesions on this side, nor was the lung compressed. On the left side there were some rather strong adhesions between the costal and pulmonary portions of the pleura. The right lung presented a dark congested appearance externally; the upper lobe was emphysematous at the edges. The upper and middle lobes when cut exhibited patches of dark extravasation defined by a distinct border. The whole of the posterior lobe of this lung was converted into a dark mass, very solid, of a deep purple colour, approaching to black, exuding blood of the same colour from its cut surfaces. These appearances clearly indicated the existence of pulmonary hæmorrhage, the apoplexia pulmonum of Laennec, which was detected during life. This disease, which is not very common, presents a considerable resemblance

to pneumonia in some of its forms, but may be distinguished by its very dark colour, approaching to black, and by terminating abruptly by a distinct border, and not passing gradually into the colour of the surrounding tissue. The mucous membrane of the bronchi was of a deep purple colour, apparently from infiltration from the adjacent congested parenchyma; the bronchial tubes contained no frothy mucus. The left lung presented the same morbid appearances as the right, except that the dark patches of extravasation were not quite so extensive. The heart was enlarged, and extended to an unusual distance to the right of the mesial line, almost as much being placed on the right side as on the left. The right auricle was very much dilated, and contained a large clot of blood; the right ventricle was also dilated, and the carneæ columnæ were very much thickened; the cavity also contained a large clot of blood with fibrin in its centre. The tricuspid valves and the pulmonary semilunar valves were healthy. The left ventricle was hypertrophied, and the carneæ columnæ were thickened. The auriculo-ventricular opening on this side was very much contracted, and was scarcely large enough to admit the passage of a goose-quill, although this aperture will usually admit the entrance of two fingers. This contraction was owing to the disease of the mitral valves which had grown together, forming a tough, strong, cartilaginous tube round the orifice. The semilunar aortic valves were not diseased, but the opening was contracted so as hardly to admit the passage of one finger.

Abdomen.—There were upwards of two quarts of thin serous fluid in the cavity of the abdomen. The colon was enormously distended with gas. The liver was very dense in its consistence, and its substance was highly congested. The stomach presented no morbid appearance, and the spleen, pancreas, kidneys, and other organs were all healthy.

This case illustrates the train of morbid phenomena which arise in consequence of obstruction existing in one of the orifices of the heart. Owing to the contracted state of the mitral valves, the left ventricle does not receive a sufficient supply of blood to furnish to the arterial system, and hence the weak, thready pulse and general debility. As the blood cannot pass through the left side of the heart, it necessarily accumulates in the lungs; and hence congestion of those organs, with cough and difficulty of breathing. In consequence, too, of the obstruction in the lungs, the right ventricle and auricle become dilated and hypertrophied, owing to the forcible but vain efforts which they make to propel the blood through the congested lungs. From the accumulation of blood in the right side of the heart, the whole venous system becomes congested; the liver is gorged with blood; the veins are universally distended; the absorbents lose their power; hence arises lividity of the lips, feet, and hands; and hence too arise effusions into the serous cavities and into the general cellular tissue. In a more advanced stage the congestion in the lung passes into pneumonia or pulmonary hæmorrhage; and the brain, being influenced like the other important organs of the body, becomes congested, its membranes become inflamed, and pour forth fluid into its cavities, and its substance being also affected, becomes the subject of inflammation, ending in common softening or extensive ramolissement.

The diagnosis in this case was not difficult. As dropsy is very seldom, if ever, idiopathic, the seat of disease was sought for in some important organ; and the heart was first examined. It was found that its action was very strong, and felt over a great space; it was therefore concluded that there was increase in the volume of the organ. The first sound of the heart was accompanied by a loud and prolonged blowing or bellows-murmur, whence valvular disease was suspected; and as this blowing murmur was heard loudest at the apex of the heart, the mitral valves were fixed upon as the seat of disease.

The prognosis was necessarily unfavourable; and in such a complication of morbid actions, no remedial means could be expected to produce a beneficial result.

CASE 2.—*Disease of Mitral Valves; Pneumonia; Ramolissement.*

On the evening of Nov. 16, 1841, I was sent for to attend Sarah T., ætat. 52, a pauper patient in the Islington Infirmary. When I arrived I was informed that she had had a fit, and had been insensible about a quarter of an hour. When I saw her, however, she was in full possession of her mental faculties; but she spoke very indistinctly in consequence of an accident she had met with many years ago, and by which she lost, by exfoliation, large portions of the left upper jaw-bone and of the nasal bones. Her mouth, in consequence of the same accident, was habitually distorted. She had not been inclined to sleep previous to the attack, but, on the contrary, had suffered from the want of sleep. She complained of total inability to move the left arm, and when it was lifted by another person, as soon as the hold was relaxed, it fell down like an inanimate mass. But when the skin of the hand or arm of this side was pinched she immediately complained of the pain; she was able to move the left leg as well as the right, and both legs seemed endowed with the usual amount of motory and sensitive power. The pupils presented no unnatural appearance, but were of the usual size and shape: she complained of great pain in the abdomen, with a disagreeable taste in the mouth and flatus; tongue

moist; not much thirst; pulse rapid and irregular; bowels rather confined.

Physical Signs.—The action of the heart was very irregular; a loud blowing murmur accompanied the first sound, heard chiefly at the apex; no murmur in the neck.

℞ *Carbonate of magnesia*, gr. v;
Essence of peppermint, m. v;
Epsom salts, ℥ss;
Infusion of senna, ℥j.

The draught to be taken every four hours.

17. She was this morning again very carefully examined, in order to form, if possible, a correct diagnosis; but although the paralysis of the left arm gave me reason to suppose that disease of the brain existed, the other symptoms were too vague and unsatisfactory to point out the precise nature of the cerebral lesion. The pupils were of their natural appearance; she had passed a sleepless night; she was in full possession of her mental powers. The left arm was still perfectly sensible, though it had entirely lost the power of motion; no paralysis existed in any other part. The patient complained of great pain in the abdomen and back, which she said was increased on pressure; but as this external sensibility was general over the whole body, it was considered to be neuralgic.

℞ *Tincture of opium*, m. x;
Mint water, ℥j.

The draught to be taken immediately, and repeated every four hours.

19. The symptoms are much the same, but she appears to be sinking; pulse very feeble, but the action of the heart remains strong, the murmur loud, and the motions irregular; tongue dry and furred; great thirst; headach, and occasional nocturnal delirium. She was ordered a glass of port wine daily, and the following:—

℞ *Aromatic spirits of ammonia*, m. xx;
Compound tincture of lavender, m. x;
Mint water, ℥j.

The draught to be taken every four hours.

20. On a physical examination of the chest, a crepitant rhonchus was detected at the lower and posterior part of the right lung. There was no cough, dyspnœa, or expectoration, but the presence of pneumonia was clearly indicated by the physical sign, and by that alone. The state of the pulse precluded the possibility of abstracting blood, and in consequence of the general depression of the vital powers it was not judged expedient to discontinue the use of the wine and ammoniacal mixture. But the following was ordered in addition:—

℞ *Calomel*, gr. iii;
Opium, gr. ss.

To be taken in sugar immediately.

The two following days the symptoms remained essentially the same; the crepitant rhonchus continued, but, as from the first, without any cough, expectoration, pain, or any other rational symptom of pneumonia, adding another instance to many already observed and recorded, in which the only evidence of this formidable disease is to be derived from auscultation; and proving the necessity in all cases of examining the condition of the lungs and heart, whether those organs appear to be affected or not. The calomel and opium, together with the wine, and the draughts mentioned above, were continued daily, but without any amelioration of the symptoms. She gradually sunk, until November 23rd, when she expired, having been in full possession of her mental faculties for many hours before her death, complaining of excessive tenderness of the abdomen and back, but never referring her complaint either to the head or the chest, which were the real seats of disease, and were so considered during life, although the violent pain complained of in other parts was calculated to mislead.

Post-mortem Examination.

Head.—The skull-cap, skull, and dura mater, presented no remarkable appearance. The arachnoid membrane was much inflamed, its vessels being minutely injected; it presented an opalescent appearance, owing to a quantity of thin, transparent, serous fluid effused beneath it, and which escaped in great abundance from the surface of the brain and the spinal cord during the dissection. The substance of the left hemisphere was healthy, and of its natural consistence; the ventricle of the same side contained an unusual quantity of thin serous fluid. On examining the right hemisphere a patch of softening was discovered in the anterior lobe, above the roof of the ventricle, and not extending to the surface of the brain; the softened part was two inches in length and one in breadth, of a curved form. The softened part was of a dirty brown colour, and of a ragged, ulcerated appearance. On inspecting the ventricle of the right side, it was found that the corpus striatum was softened, its surface presenting a ragged appearance, uncovered by the layer of arachnoid membrane which lined the rest of the cavity. On tracing the diseased mass, it was found that the softening involved the whole of the corpus striatum of the right side, with the exception of a small portion of the white substance, and extended as far as the inferior surface of the brain. The whole of the softened part was of a pulpy consistence, and of a dirty ash-grey colour, the grey and white substances being apparently mixed up together into a confused mass.

Chest.—The right lung was adherent to the parietes of the chest by strong bands; the left lung was not adherent. The heart, on a superficial view, appeared larger than usual. The right auricle and ventricle, the pulmonary artery, and the venæ cavæ, contained a large quantity of half-coagulated blood, together with large coagula of fibrine

of a straw colour. The parietes of both ventricles were rather thick, and the carneæ columnæ were increased in size. The tricuspid valves, and the semilunar valves of the aorta and pulmonary artery were healthy; but the mitral valves, as was indicated by the symptoms during life, were found diseased. The auriculo-ventricular opening of the left side was very much contracted, so as scarcely to admit one finger, and the mitral valves were thickened and indurated so as to form a strong, narrow tube.

The right lung was generally congested, and the posterior part of the inferior lobe was highly inflamed. The cut surface presented a dark red colour, and a large quantity of frothy fluid flowed from the incision. The substance, however, was not hepatised, but crepitated as usual, showing that pneumonia had not proceeded beyond the first stage.

Abdomen.—The liver was congested; the kidneys somewhat enlarged; the intestines perfectly healthy. There was no appearance whatever in the abdomen to account for the agonising pain, of which she complained during life.

CASE 3.—*Hypertrophy of Heart; Pneumonia; Meningitis.*

Hannah P., ætat. 64, a thin, debilitated woman, an inmate of the Islington workhouse, who had frequently suffered from attacks of dyspepsia, chronic bronchitis, and other diseases, was seized on the 6th of March, 1842, with an attack of vomiting, attended with acid taste in the mouth, flatulence, pain at the stomach, and general uneasiness. She was ordered the following:—

℞ *Tincture of opium*, m. vi;
Carbonate of magnesia, gr. v;
Epsom salts, ℥ss;
Infusion of senna, ℥j.
The draught to be taken every four hours.

7. The more urgent symptoms have been somewhat relieved by the medicine, but she still feels great languor and uneasiness with prostration of strength, without being able to refer her malady to any particular part; pulse 104, very weak, irregular, and difficult to be counted; action of the heart very irregular, impulse weak; no morbid sound; does not complain of cough, difficulty of breathing, or pain in the chest, but it is obvious that her respiration is embarrassed, for the muscles of the neck and face are brought into violent action during each performance of that function. On examining the chest by auscultation, crepitant rhonchus was heard in the lower lobes of both lungs posteriorly, more particularly on the right; the expectoration was scanty, very glutinous, adhering to the pot, and of a rusty brown colour. Thus the existence of pneumonia was manifest, but owing to the depression of the vital powers it was not considered proper to abstract blood. She was ordered to apply a blister to the sternum, and to take the following:—

℞ *Calomel*, gr. ii;
Opium, gr. ss.
To be taken in sugar every four hours.
℞ *Ipecacuanha wine*, m. xx;
Mint water, ℥j.
The draught to be taken every four hours.

8. Feels a little better, but she has a cough attended with thick, tenacious, copious rusty-brown expectoration; crepitant rhonchus heard in the inferior portion of both lungs; action of the heart very irregular, but the impulse to-day is strong, and felt over a great space; there is no morbid sound; pulse very feeble and irregular, 88; tongue brown. To continue the powders and draughts.

9. Says she is better; but she still spits the same viscid, brown sputa, and her respiration is embarrassed, 32 in a minute; pulse 104, very feeble and irregular; tongue brown and furred; great thirst; crepitant rhonchus heard in both lungs; bronchial respiration on the left side in front, and on the right side back; prognosis unfavourable. To take a glass of port wine daily, and to continue the draughts and powders.

11. Exhibits no marked sign of improvement, though she still says that she is better; bronchial respiration very distinct in the upper portion of the right lung, exactly resembling cavernous respiration, from which it was distinguished by the previous history of the case; pulse 120, more regular than before; tongue brown, dry, and furred; hectic flush on cheeks; great thirst; sputa, as before, very copious.

She died March 13th.

Post-mortem Examination Sixteen Hours after Death.

The body was emaciated.

Head.—The scalp and skull presented no morbid appearance. The dura mater was congested, and the sinuses full of half-coagulated blood. The arachnoid membrane and pia mater were inseparably connected, and their vessels, both arteries and veins, to their minutest ramifications distended with blood. The arachnoid membrane was not much thickened, except at the vertex, where it presented an opake, pearly appearance, owing to the effusion of serous fluid beneath it, and which amounted to about three fluid ounces. The substance of the brain was of a darker colour than usual, and its cut surface exhibited a number of bloody points. There was a little fluid in the ventricles; their serous lining membrane was congested, and the choroid plexuses were œdematous. The consistence of the brain itself was firm throughout. There had been no symptoms during life indicating cerebral disease.

Chest.—There were no adhesions between the costal and pulmonary portions of the pleuræ. The right lung was much enlarged

and exceedingly heavy. The upper lobe was completely solidified, and the substance, when cut, presented a soft, cheesy consistence, of a dull ash-colour, totally destitute of crepitation, and filled with innumerable small cavities, whence a thick yellowish pus exuded. This exhibited the grey hepatisation passing into the third stage of pneumonia, viz., purulent infiltration. The middle lobe of this lung was congested, of a dark, scarlet colour, and when cut, poured forth a quantity of frothy fluid mixed with blood. In the inferior lobe of the left lung at its posterior part, the texture of the organ was much reddened, and, on being cut, it also poured forth a quantity of frothy mucus mixed with blood. These last-mentioned parts exhibited the first stage of pneumonia. The bronchial tubes were inflamed, and contained a small quantity of frothy fluid. The heart appeared externally rather above the natural size; it was found that the cavity of the left ventricle was rather diminished in size, while its walls were very much thickened, thus presenting an instance of simple hypertrophy. The ventricles and all the valves were healthy, as was expected from the absence of any murmur during life.

Abdomen.—The liver was much enlarged, and its peritoneal covering was opake and thickened. The substance of the organ exhibited marks of congestion, the ultimate ramifications of the portal vein which surround the minute lobules being of a darker colour than the inclosed spaces. The spleen was of a dark colour, very soft, and easily torn. The kidneys were rather larger than usual, and their texture was congested; the intestines also bore the marks of congestion, but were otherwise healthy.

There is a considerable similarity existing in the above three cases. In all there was disease of the heart, the mitral valves being affected in cases 1 and 2, the left ventricle being hypertrophied in case 3. In all there was disease of the lungs, clearly consequent upon the cardiac lesion, pulmonary hæmorrhage being the form assumed in case 1, pneumonia in cases 2 and 3. The liver was congested in all. The brain was affected in all the cases; inflammation of the arachnoid membrane with effusion of fluid being observed in each case, and extensive ramolissement being superadded in case 2. In all the cases the nature of the morbid action was ascertained during life, except in the case No. 2, in which the symptoms of ramolissement were too obscure to determine its existence; but it must not be forgotten that disease of the most important organs may remain undetected during life, and unsuspected even by the patient, when sudden death stops short his career, and the post-mortem examination alone indicates the seat and nature of the organic lesions.

STRANGULATED HERNIA

SUCCESSFULLY TREATED BY EXHAUSTION THROUGH THE ELASTIC TUBE.

To the Editor of THE LANCET.

SIR,—I am induced to submit to you the accompanying case of strangulated hernia, successfully treated by exhaustion through the elastic tube, believing that every fact is deserving of record which tends to increase the number or confirm the efficiency of those agents by the use of which a dangerous operation, otherwise unavoidable, may be sometimes dispensed with. I am, Sir, your obedient servant,

CHARLES S. WEBBER, Surgeon.

Orford, Suffolk, May 10, 1842.

On Sunday, the 3rd of May, at 10, a.m., I was requested to visit Benjamin Nickels, wheelwright, aged 20, whom I found labouring under the usual symptoms of strangulated hernia. The rupture was stated to have existed from birth, and had hitherto been easily reducible, having been kept up by a truss, which the patient had worn for years, but which he had carelessly laid aside the preceding week. On Friday morning, while he was at work, the bowel descended; and, after considerable effort, he found himself unable to return it. From this period symptoms of incarceration rapidly set in, and had been increasing in intensity up to the time when I saw him, about eight-and-forty hours.

The tumour, which occupied the scrotum on the right side, was of the size of a goose's egg, remarkably tense and unyielding, particularly at the neck of the sac; there was great tenderness and distention of the abdomen; an oppressive girting and dragging at the scrobiculus cordis; a quick and wiry pulse; much anxiety of countenance; occasional hiccough; frequent vomiting; obstinate constipation, the bowels not having been relieved since the commencement of the attack, although he had taken aperients before requesting medical assistance.

The taxis was diligently and carefully applied for about twenty minutes without success. The patient was then bled to syncope, and the taxis again had recourse to, followed by the application of cold to the tumour, and such other of the usual remedial measures as circumstances permitted. These having been employed for the space of an hour and a half with no better result, I had determined to proceed to the operation, when the idea of passing the elastic tube per anum, as first recommended by Dr. O'Beirne (and practised recently by your correspondent, Mr. Haine Maunder, of Collumpton,*) suggested

* Vide LANCET, vol. xxxvii., p. 693.

itself, and, with the concurrence of my friend, Mr. Randall, of Orford, who kindly rendered his assistance, I resolved to give this plan a trial before resorting to the *ultima ratio* of the knife.

Accordingly, a common enema having been previously administered, I introduced the œsophagus tube of Weiss's stomach-pump with tolerable facility, until it arrived (as nearly as I could judge) at the sigmoid flexure of the colon, where it encountered some degree of resistance, which yielded, however, in a short time, to moderate pressure, after the injection of a little cold water. The tube was now passed gradually up until its whole length, about twenty-five inches, had been introduced, the brass extremity alone remaining without.

After waiting a quarter of an hour, between two and three pints of water were thrown up and retained in the bowel for a short period; the cylinder of the pump having been unscrewed from the elastic tube, and the mouth of the latter closed by the thumb, on withdrawing which the fluid repassed in a jet of considerable force. The cylinder was now readjusted to the tube, and the action of the machine being reversed, the piston was worked rapidly with the view of producing a degree of exhaustion or partial vacuum in the intestine; gentle taxis was at the same time resumed, and after the expiration of four or five minutes (during the latter part of which the patient complained of a sensation of bearing down referred to the whole abdominal region), I had the satisfaction to feel the contents of the tumour recede from beneath my fingers, and slip into the abdomen with the usual gurgling which accompanies the return of intestine.

The man recovered without an untoward symptom, and was removed to his father's house at Wickham, a distance of about nine miles, on the third day afterwards.

I am disposed to attribute the successful result of the foregoing case, in a principal degree, to the production of a partial vacuum in the intestine immediately below the seat of strangulation, by the exhausting process, that being the direct agent to which the obstruction appears to have yielded; and I am induced to recommend a trial of this measure to the profession as an adjuvant to that valuable instrument, the elastic tube, in cases where the latter alone may prove inefficient.

I have since reperused Dr. O'Beirne's excellent work on Defæcation, with the view of ascertaining whether exhaustion through the tube had been adopted in any of his cases. I cannot discover that the doctor has availed himself of this expedient, although a case of constipation is cited by him in which a Dr. Duguid, of Kirkwall, in Scotland, introduced an elastic tube into the colon with the effect of discharging an accumulation of fæces; and I observe that this gentleman attempted to exhaust with the view of overcoming the resistance he experienced to the passage of the tube at the sigmoid flexure, but unsuccessfully, which circumstance induced him to undervalue the measure. There is, however, another case which seems to have suggested to Dr. Duguid the use of the tube, and which is reported in the Medical and Physical Journal, for December, 1827, being communicated by Dr. James Johnson, as having occurred in February, 1826, in the practice of Dr. Alexander, of Genoa, who appears to have employed exhaustion through a hollow bougie, after twelve days of constipation, and the failure of tobacco enemata and various other remedies, with complete success. This case, which is a very interesting one, seems to have excited but little attention.

I cannot conclude without expressing my conviction (in nearly the words of Dr. O'Beirne, who uses them, however, with reference to the tube only) that no surgeon is justified in proceeding to the operation for strangulated intestinal hernia, without having previously given a fair trial to the measures above alluded to.

THE SETON IN CHRONIC DISEASE OF THE BRAIN.

To the Editor of THE LANCET.

SIR,—Should you consider the annexed case worthy of insertion in THE LANCET, I shall feel obliged by your giving it publicity. I remain, Sir, your obedient servant,

W. B. BARTON, M.D.

Horncastle, May 5, 1842.

Mr. T., aged 64 years. Visited September 27, 1841. Took cold in the summer of 1839 from sleeping on damp grass, in a field, which induced fever with acute inflammation of the brain. His usual medical attendant was promptly summoned, and the early treatment, it would seem from the report and its effects, was active and judicious, the fever and acute inflammation subsiding in a few days. There remained, however, an obtuse pain in the head, without fever, and slight mental obscuration. The latter, notwithstanding the continued administration of remedial agents, increased gradually, until at length Mr. T. became perfectly childish and idiotic.

At the time of my first visit (Sept. 27, 1841,) he did not know the different members of his family, could not converse at all, and scarcely speak intelligibly; did not clearly understand any ordinary questions put to him, and spent his days in a chair by the fireside (cold even on a bright midsummer's day), in a state of pitiable fatuity. The gradual annihilation of the mental powers, accompanied by a simultaneous decay of the corporeal functions, had brought

him apparently to the very verge of the grave.

On carefully reviewing the previous treatment and the present symptoms, I certainly formed a most unfavourable prognosis—death the ultimate result. However, I ordered nourishing diet, mild aperients as occasion might require, and the insertion of a seton at the nape of the neck.

The discharge from the seton once properly established, an amendment was shortly perceptible; in the course of ten days a few faint rays of pristine intellectual vigour dawned, and the corporeal functions responded simultaneously. Progressively the disease yielded, and in the course of five weeks my patient again became an useful member of society.

I called on the 2nd Dec. following, when I found him engaged on his farm, in the full enjoyment of his intellectual powers, looking well and healthy. He stated that he had no recollection of having seen me in September, and that he was not sensible of the insertion of the seton.

About the middle of April the seton was withdrawn, my patient being in the enjoyment of perfect health, as well mental as corporeal, which has continued to this day.

THE RESULTS AS AFFECTING THE EUROPEAN PORTION OF THE ARMY THAT LANDED AT RANGOON, DURING THE LATE BURMESE WAR OF 1824-5-6.

1st. It is now well known that the climate of the Tenasserim provinces, occupied by British troops since 1825, is not inimical to European health; and there can be no doubt that similar results would have been obtained in regard to Rangoon, had the circumstances under which our troops served there been equal. But the war was declared, by the Government of the day, in the month of March, consequently the meat provision for the troops was to be cured under a temperature so high as to render a partial decomposition of it probable, even before the meat could have taken in the salting, and such was found to be the fact in serving out the provisions immediately on the landing of the expedition at Rangoon in May.

2nd. Rangoon was occupied by the British force on the 11th of May, 1824, and it broke ground for the advance into the interior on the 11th of February, 1825; consequently it remained in position at Rangoon, and was actively employed in field operations around the town during nine months, five of which were included in the south-west rainy monsoon of the country.

3rd. The sickness and mortality of the British soldiers during the nine months here specified were such as never before occurred in any recorded British expedition, and such as are believed to be altogether unknown to modern warfare; for, out of an aggregate of 3004 men, there were admitted into hospital 10,646, or the proportion of 3556 per thousand; in other words, every soldier was attacked by disease three or four times; while the deaths in six corps, in eleven months, were 2000, exclusive of the Madras European regiment. Altogether the deaths nearly equalled the number of British troops originally employed; and, but for seasonable reinforcements, the objects of the expedition must have failed from the entire annihilation of the force.

4th. It is useful to compare the results of the Burmese with those of European war, because there is no other mode whereby the authorities, with whom rests the ultimate reward of the soldier, can know the risk of life and peril of constitution by which his pension has been earned. On this view I will state briefly, on the authority of the statistical reports of the army, prepared by Major Tulloch, and printed by order of Parliament, that during a period of 41 months in which the Peninsular war was prosecuted with the utmost vigour, "4 per cent. occurred in battle, or of wounds, which proved fatal within a few days thereafter, and 12 per cent. was from disease and other causes;" whereas, in the first year of the Burmese war, 3½ per cent. were killed in action, and 45 per cent. perished by disease—making a total loss of 48 per cent.; consequently, each person employed throughout that year encountered more risk of life than in three Peninsular campaigns. In the second year of the war the proportion of deaths in action or by disease, was only about one-half of what occurred in the first; but even then the risk of life was considerably more than during a similar period of the most severe service in the Peninsula." In short, 72 per cent. perished in these two years."

5th. The causes of so appalling a loss were—defective arrangement for the supply of food; the making war at the worst instead of the best season, so as to cause a most unnecessary exposure and fatigue; the want of necessaries and comforts for the sick in hospital, who had for months to subsist, under the pressure of aggravated disease, on tainted salt rations, until scurvy was added to the catalogue of misfortune,—a scourge which at length infested the whole army, those on duty as well as those who crowded the hospitals.

6th. It is not pretended that the experience of an invading army can any where be assumed as a correct standard for estimating the influence of climate; but the fate of the Rangoon expedition proves that, in a climate esteemed by all superior to that of India, the most fatal results are sure to follow the absence of a due provision being

made for the wants and comforts of the soldier.

7th. In the "introduction" to his last valuable and interesting report, Major Tulloch regrets the absence of a superintending medical officer of her Majesty's service, and ascribes, with truth, the difficulty experienced in obtaining information of an accurate nature to this circumstance. There were two superintending medical officers from Bengal (true samples of the seniority system, of which we have before complained); but neither these gentlemen, nor the Medical Board of Bengal that sent them, had ever dreamt of a "return" of the kind alluded to by the major, and by consequence all three were equally innocent of the matter of information. "The difficulty experienced," says the report, "on this occasion, however, will, it is hoped, afford a practical lesson on the necessity for a superintending officer of the same service always taking the field with any considerable force of her Majesty's troops when employed in India, not only for the purpose of ensuring accuracy in these returns, from which alone a due estimate can be formed by the head of the medical department in this country of the prevailing diseases, and of the success of the treatment adopted by his officers, but also for the purpose of suggesting such measures for improving the health and promoting the efficiency of the soldier, as former experience has shown to be effectual under similar circumstances with British troops in the field." —*Statistical Reports.*

Here, then, we have an example of a whole service of nearly eight hundred medical officers of India, superseded in and debarred from the duties of superintendence in the legitimate field of their best and tried exertions, *because* their boards will not adopt uniformity in reporting with her Majesty's service, thus seriously injuring their interests, and disparaging their subordinates, at the same time that they sacrifice the noblest field of comparison afforded in the whole range of medical inquiry.

A Subscriber.*

VEGETABLE DIET.

To the Editor of The Lancet.

Sir,—In reference to the very interesting case reported by Mr. Rowbotham in your last number, I beg to state that I can bear very strong testimony to the remarkably good effects of a diet of vegetables (one of acidulous fruits more especially) in many forms of cutaneous disease. It may be stated as a general rule, that when a cutaneous eruption depends on hepatic derangement (not organic), characterised by pain, tumidity, and profuse secretion of the liver; by dark-coloured stools (and more especially if these produce *ardor ani*); by yellow-coated tongue, bitter morning taste of the mouth, accelerated pulse, dry heat of skin, and nocturnal sleeplessness, the judicious adoption of a vegetable diet will be found a most efficacious means of removing that condition of the digestive organs, and that constitution of the blood from which the eruption and the unpleasant symptoms enumerated result. This I have pointed out elsewhere,* and endeavoured to explain, and recent experience has corroborated the views there stated. I am, Sir, your obedient servant,

Robert Dick, M.D.

London, May, 1842.

* This important letter has been duly authenticated.

* "Derangements, Primary and Reflex, of the Organs of Digestion."

REPORT

OF A

DEPUTATION OF THE COUNCIL

OF THE

BRITISH MEDICAL ASSOCIATION

TO THE

POOR-LAW COMMISSIONERS,

April 29, 1842.

The deputation (which consisted of Dr. Webster, Mr. Davidson, Mr. Farr, Mr. Grainger, and Mr. Septimus Read,) were most courteously received by the commissioners, Mr. G. C. Lewis and Sir Edmund Head, Bart., who were pleased to say, on the objects of the deputation being stated to them, that they would be happy to afford every explanation and information in their power, and to receive any suggestions from the council of the association.

The objects of the deputation were,—

I. To ascertain if the commissioners intended and had the power to enforce and carry out their late medical order.

II. To request explanations and to offer suggestions on some of the chief points contained in the medical order just issued.

III. To press on the attention of the commissioners some important matters not included in the "order."

I. To the first question the commissioners replied, that they had full power and authority under the Poor-law Amendment Act to carry out the provisions of the "medical order" which they had issued a few weeks since, and which required forty days to elapse from its publication before it could be legal; and that they intended strictly to enforce it should it be necessary to do so from the contumacy of any board of guardians, which could be done by moving it

into the Court of Queen's Bench: but as most of the medical arrangements had been made for the parochial year, the order would not immediately come into full operation, and that this had been purposely done that all parties concerned might be aware of its provisions, and not be taken by surprise.

The deputation said, they thought it the more necessary to elicit *distinct information* on this subject, from the general feeling which had existed in the profession, that the commissioners have acted as if they had hitherto been insincere in their professed wish to ameliorate the present system of medical relief, both as regards the poor and the profession. That this has no doubt arisen from a belief (emanating in the first instance from Somerset-house itself) that the commissioners *had not the power* to carry out the recommendations of the medical profession; that this opinion had been strengthened also by the manner in which this important subject was alluded to by the commissioners in several of their annual reports, notwithstanding the parliamentary investigation and the report of the select committee recommending extensive alterations; and from a document which was published by the commissioners after they received the last deputation from this association, but which only *recommended* certain changes to the guardians instead of *enforcing* them.

II. The deputation adverted to their former interviews with the commissioners, and to the report and plans for an amended system of medical relief with which they had at their request furnished the commissioners. They were gratified to find that considerable parts of their plans were about to be acted upon, but would be glad to receive information and to offer some suggestions on this subject as contained in the medical order.

First. THE ABOLITION OF TENDER.—The commissioners explained that in all future arrangements the system of tender for medical services to the poor would be *illegal*, and that any salaries or payments made under tenders *would be disallowed*.

The deputation had no remarks to make on the subject, further than to express their most cordial satisfaction that a system which had been so injurious to the poor, and disgraceful to the profession, was at last about to be for ever abolished.

Second. QUALIFICATIONS OF MEDICAL OFFICERS.—Considerable discussion took place under this head. The deputation highly approved of the *extent* of qualifications required, but strongly objected to the invidious and unjust distinctions as to their *sources*, and which virtually excluded from office all those holding Scotch and Irish diplomas. This was felt to be doubly grievous at the present moment, when every exertion was being made to abolish such useless distinctions, and to procure *equal* rights and privileges for all members of the profession *equally* qualified.

The commissioners stated that they had been placed in a position of difficulty and delicacy on this point, but that they had acted entirely on the opinion of their legal advisers; that the Poor-law Amendment Act related only to England and Wales; that the words of the Act, in reference to medical officers, were, "person duly licensed to practise as a medical man," and that they were advised that no one could legally practise in England and Wales who did not hold an English qualification, or had been in practice previous to August, 1815, in the same way that no English practitioner could practise in Ireland and Scotland without *an Irish or Scotch qualification*.

To this opinion the deputation made several strong objections, and amongst others that this interpretation was obviously *narrowing* the meaning of the Act of Parliament, which had been so worded as to include *all* who had been "duly licensed to practise as medical men," and nothing was said as to the *source* of the qualification; that members of the Scotch and Irish Colleges of Surgeons could legally practise as surgeons both in London and all over England: so Scotch and Irish physicians could legally practise in all parts of England, and even in London, with impunity, if any law ever had existed to prevent them, which is much doubted. That English physicians and surgeons could practise in Ireland and Scotland without let or hindrance; and that the regulation now about to be adopted by the commissioners was altogether novel, and contrary to the whole of their former proceedings, and it was believed contrary to the Acts of Union connecting the three kingdoms.

The commissioners contended that their views and practice had always been the same respecting English qualifications, and that however much they might regret the state of the law, and however unjust and invidious it might be, they had no escape from it.

To this it was replied, that their own acts had not been in accordance with such an opinion, and that the deputation could not help thinking that the Act was being differently interpreted to its real meaning and intention. In proof of this, reference was made to the Poor-law Report for 1835, page 52, where the following observations occur:—"In regulating the appointment of medical officers within the new unions, we have acted on the presumption that by the words of the Act it was intended to include *equally* physicians, surgeons, or apothecaries, duly licensed to practise as such. Under these circumstances we have considered that the interests of the public and the profession itself were the best served by keeping the situations of medical officers in the new unions open to

the competition of the *whole body* of medical practitioners."

This subject is more fully discussed in a correspondence between the Apothecaries' Company and the commissioners, and the then Home Secretary of State, Lord John Russell, and printed in the Appendix to the Poor-law Report for 1836, page 514, et seq. Moreover, it was remarked that the commissioners were fully acquainted with the various qualifications of the medical officers, in consequence of a return made to an order of the House of Commons, which distinctly stated the *sources* and nature of the qualifications of each medical officer: this is inserted in a tabular form at page 215 of the Poor-law Report for 1837. But to place the matter beyond any doubt, it was recollected that in a correspondence between Dr. Webster and the poor-law commissioners in April, 1837, among other queries this one was put, viz.:—

"Are members of the Scotch and Irish colleges equally eligible with members of the London colleges to the office of medical attendant to the poor?" to which the reply was,—

"The office of medical attendant is not simply that of an apothecary; the commissioners, therefore, *do not consider that members of the Scotch and Irish colleges are excluded.*

"Signed by order of the Board,
"E. CHADWICK, Secretary."

The commissioners remarked, that since *they* (Mr. Lewis and Sir E. Head) had been in office, they had considered that the legal qualifications could only be obtained from English sources, but they understood that a Medical Bill was likely soon to be brought into Parliament, which would remove the complaint of the deputation. The deputation suggested that in the mean time it would be highly desirable that a clause should be introduced into Sir J. Graham's Poor-law Bill to put this matter upon a just and proper basis: so that *all* British medical practitioners, having the necessary amount of qualification, should be *equally eligible* to the office of union medical attendants.

The commissioners thought that there might be some objections to this on the part of the English colleges, as regarded those practitioners who had obtained their degrees without examination from some of the colleges in Scotland; but it was pointed out to them that the laxity which formerly prevailed in this respect had ceased for many years; that rigid examinations were now generally instituted, and that the curricula and examinations of the two London colleges were, in reality, the most inefficient in the whole British empire.

The commissioners then requested the deputation to supply them with a list of those colleges and universities whose curricula and examinations were sufficiently extensive to place them on a footing with the London corporations, and to qualify them for acting as union medical officers, with the view to a clause being inserted to remedy the evil complained of.

Third. MAXIMUM AREA AND POPULATION OF MEDICAL DISTRICTS.—The deputation expressed their satisfaction that the commissioners had *begun* to lessen the medical districts, but they considered that a maximum area of fifteen thousand acres (about twenty-two and a half square miles) far exceeded the safe and proper bounds, while they willingly acknowledged that this was a great improvement in comparison with the present districts, some of which extended to forty or even fifty square miles.

They also considered a population of fifteen thousand too numerous, except in very opulent districts, and referred the commissioners to the plans formerly submitted to them by the association.

The commissioners explained that they were desirous of lessening the large districts wherever it was practicable, but that there were many difficulties in the way; that they could not obtain the services of qualified practitioners in some localities, and that in many parts of Wales and the northern counties they had for the first time introduced parochial medical relief. They stated also that limiting the *maximum* districts to the area mentioned would very materially reduce the *average* size.

Fourth. FEES FOR SURGICAL AND MIDWIFERY CASES.—The deputation highly approved of separate payments in such cases, and did not materially object to the different amounts; but they objected to the fees for capital operations *being made contingent on their success*, or on the patient's surviving for thirty-six hours. This no-cure no-pay plan was derogatory to the character of the profession,—that an important operation frequently implicated the reputation of the surgeon, especially in the country, and that its failure was always a disappointment; but the non-payment because the patient did not survive so many hours was not only unjust, but might lead to very improper inferences. The deputation would, therefore, suggest that half the proposed fees should be paid for the operation, and the other half for subsequent attendance. They also thought that the fees for the consultations previous to operations (as very properly prescribed by the commissioners) ought not to be at the expense nor at the instance of the union officers; but to avoid the charge of partiality, such consultations should be arranged and paid for by the guardians; or, if the plan proposed by the association to the commissioners were carried out, of appointing a medical director, and of having medical assessors for each union, or for several unions, who might also act as consulting practitioners to

the districts, the emergencies in question would be at once provided for.

The commissioners said that they had already found some difficulty with the guardians as to expense, and they expected more as to the amount of the separate fees; that the fees were more for extra attendance than for operations, but that they would consider the suggestions of the deputation as to payment for operations, and for payment of consultations, but that there was no machinery in the Poor-law Act for appointing a medical director, or assessors, as consulting medical officers.

The deputation thought this could be easily remedied in the proposed Bill, if the plan were approved of by the commissioners, and the attention of Government directed to it.

III. The deputation did not enter into some of the minor points contained in the "medical order," but drew the attention of the commissioners to its GRAND OMISSIONS.

First. THE WANT OF ANY JUST MODE OF CALCULATING OR FIXING THE SALARIES OF THE MEDICAL OFFICERS.—Without this the deputation expressed for themselves, and for the profession generally, their feeling, that very little would have been accomplished except in the single point of abolition of tender for medical services.

That efficient attendance and the best medicines could not be supplied to the poor, *with justice to the medical officers*, at the present rate of remuneration; that, generally speaking, the salaries were one-half too low; and there was no rational method of computing the remuneration, all was guesswork or caprice, while the elements for fixing just and equitable salaries were now well known.

The commissioners said they believed that the total amount paid for medical relief under the new system was more than that under the old; that it was annually increasing, and that no doubt the limitation of the medical districts would increase it further.

The amount of medical relief in..	1838 was	£136,777
Do. do.	1839	148,652
Do. do.	1840	154,042

That the expense for vaccination for one year was 10,171*l.*, which, however, they admitted was a small sum; that they could not carry out everything at once, especially in opposition to the guardians, who already demurred at the amount of medical salaries; that they (the commissioners) were not omnipotent, and could not at once overcome long-existing prejudices and strong feelings; that they had introduced medical officers into many extensive unions, particularly in Wales and the northern counties, where none existed before; that they were gradually raising the remuneration for medical services, and were anxious by so doing, and by various alterations, to ensure the best medicines and attendance to the poor.

The deputation doubted whether the total amount for medical relief exceeded that under the old system, which, however, was by far too low; that the *direct salaries* were probably equal in amount, but that the remuneration for extra charges, and under suspended orders, was probably equal to the salaries. If the commissioners could abolish tender, and make other similar alterations, it was to be presumed that they had the power legally to fix the amount and mode of calculating the medical salaries, &c., and if not, such power might now be obtained so as to settle equitably to all parties this long-agitated question.

Second. WANT OF MEDICAL SUPERINTENDENCE.—Under this head the deputation urged the importance of a general system of medical supervision, by the appointment of a MEDICAL DIRECTOR (or commissioner) with the assistance of medical assessors or *inspectors*. The director would, in conjunction with the commissioners, superintend the system of medical relief generally, while the assessors or inspectors would act locally in carrying out the proposed amended plan, by arranging the proper size of districts, and arbitrating between the medical officers and guardians in cases of difference, &c. They would also inspect the books of the officers, receive their reports, and give in a general report, at stated periods, of their districts; and not least, they might be the *consulting officers* in cases of accidents and serious diseases, when required by the guardians or union officers.

The commissioners objected that there was no machinery or powers under the Act to carry out such a system, and that the guardians already thought the expense of medical attendance was too great, and that other improvements would follow those already adopted, as occasion might require.

After some further discussion, the commissioners requested that the deputation would furnish them with such suggestions as occurred to them, both on the medical order lately issued, and on the system generally, and that they should be glad to receive it as soon as was convenient, as the Poor-law Bill would be immediately brought into the House of Commons.

The deputation then thanked the commissioners for their patience and courtesy, and for the great attention which they had given to the various matters laid before them.

THE BITE OF CLEOPATRA'S ASP.

THE bite of some serpents, as the coluber aspis, is said to produce nervous apoplexy, and that so mildly, that it was sometimes chosen as a means of self-destruction by those among the ancients who were epicureans even in suicide, as was the case with Cleopatra, who selected, as the means of her destruction, the "pretty worm of Nilus."—*Dr. Fletcher's Pathology.*

THE LANCET.

London, Saturday, May 28, 1842.

"THE remuneration of medical officers should be such as *to insure proper attention and the best medicines.*"—*Parliamentary Committee.*

"The guardians will doubtless perceive that unless the medical officer be *adequately remunerated, no vigilance on their part will suffice to secure proper attendance to the poor under his care.*"—*Poor-law Commissioners.*

"Of what importance," we have been asked, "is it, whether the union medical "officer be well or ill remunerated? It is a "matter for him to settle with his employers. "If his services are worth more than *three-"halfpence* a visit, he will ask for, and ob-"tain, more in the market; the price of "labour will in this case, as in all others, be "regulated by the supply and demand." We are not going to controvert the general doctrine, nor to deny that the public have a right to obtain professional services on the same terms, and at least as cheap, as individuals. Here we have to remark, however, that the boards of guardians obtain the services of medical officers at a small fraction of the ordinary rate of remuneration which is paid by private individuals. Instead of a guinea, half-a-guinea, five shillings, or half-a-crown a visit, the guardians pay, upon an average in the country, *three-halfpence a visit*; or, for the poor, *one-twentieth* part of the lowest sum given for attendance on themselves, or upon the members of their own families. How does this happen? Is the same "proper attention" given to the poor, by the union officers, for one-twentieth part of the ordinary fees, or is the "attendance" of inferior quality and value, to the twentieth degree? The Poor-law Commissioners, if the question were addressed to them, would probably reply, that they "have "no means of procuring positive information "on the subject, and do not know."

For medical attendance on the poor, you give *one-twentieth* part of the remuneration which you pay for attendance on your own families, and have no accurate means of ascertaining the value of the medicines or attendance supplied. You admit this. Would you think for a moment of contracting with your butcher to supply the poor with meat, wretched as your diet is, at *a halfpenny a pound*, when you had no means of testing its quality? What would be the consequence of a proposition of the kind? Would not your proposal be scouted by every respectable butcher in the trade? And would there not be a danger that the contractor would, at a twentieth of the market price, supply the poor with something worse than dog's meat? If you offered your solicitor one-twentieth part of his 3s. 6d. or 6s. 8d. and he accepted it, would you expect your cause to receive ordinary attention? It is unnecessary to multiply these illustrations; for it is a well-established rule, that before you can avail yourself of direct competition in lowering prices, you must have some ready and certain means of testing the quality of the articles supplied; and where this means is not possessed, you can only secure good articles by having recourse to persons of established character, and paying the ordinary price.

The most superficial examination must show that unless the medical officers are paid throughout the country on some fair principle, they cannot be expected to discharge their painful duties efficiently. The Poor-law Commissioners admit as much. We shall proceed to show the inequalities and injustice of the present system of remuneration as administered by them, and then inquire whether it is most desirable that the medical profession should be driven to take the matter into their own hands, and refuse simultaneously to attend the poor for *three-halfpence* a visit; or that the Poor-law Commissioners should regulate the salaries, with the assistance of a competent medical authority, under the sanction of the Government and Parliament.

For the principal facts we shall have recourse to the returns procured by the Parliamentary Committee in 1838, and to the medical evidence. From all we can learn, no improvement of much consequence has taken place in reference to this matter within the last five years.

We shall first show that great *inequalities* exist in the rates of remuneration, where the circumstances are nearly the same. In eight counties the average remuneration was 3s. 3¼d. per case, but in Norfolk it amounted to 4s. 5¼d., in Suffolk to 3s. 1¾d., and in Wiltshire to 1s. 11¼d. per case! The average area of the medical districts in the three counties was twenty-two, twenty-three, and twenty-four miles. The three counties are agricultural. The drugs and the skill cannot differ. Whence, then, does it happen that the inequality is maintained under a central commission? The cost price of cheap but genuine medicines is 2s. 6d. per case; the attendance at 4d. a visit would amount to 2s. 6d. per case; and the journeys, including horse hire, in the wide districts of Wiltshire, cannot be set down at less than 2s. 6d., which will together make 7s. 6d.; while the return gives *one shilling and eleven-pence halfpenny* a case as the average remuneration for attendance on the poor of Wiltshire. In Norfolk the remuneration is more than double in similar cases. In the *Crediton union* the payment was per case, and differed to the following incredible amount in four medical districts, without any corresponding difference of area:—3s. per case in the first district; 1s. 9d. per case in the second district; 1s. 9d. per case in the third district; and 6s. per case in the fourth district. In the Kingsbridge union the payment was 10s., 8s., and 7s. 6d., in different small districts; but a maximum was fixed, which the salary could not exceed. In the Tiverton union the payment vary from 2s. 6d. to 5s. a case. The payment per case ranges in Devonshire from 1s. 6d. to 8s. and 10s. per case, without any regulated ratio being preserved between the amount of duty and the remuneration. In nearly all the districts of the county a maximum was fixed (which the salary could not exceed), whatever may have been the number of cases attended; an unjust arrangement, which must, we fear, be directly ascribed to the ignorance or unfairness of the Assistant Poor-law Commissioner.

In the metropolis the remuneration is, on an average, *one shilling and five-pence farthing* per case. It makes one shudder to reflect on the miserable remedies and attendance which can be given to the poor for this paltry pittance! One of the metropolitan surgeons, a very humane and honest gentleman, told the Committee that his salary (100*l.* a-year) amounted to "*one shilling and a halfpenny* "*in each case*, attending from seven to ten "days;" and that his druggist's bill for supplying the paupers in a population of about twenty thousand was 50*l.* a-year. The drugs which the poor got cost, therefore, sixpence in each case! We shall show very shortly that "proper medicines," to say nothing of the "best medicines," to which the Parliamentary Committee adverted, would cost, at the very least, 2s. 6d. per case. And what sort of attendance, we should like to know, is a gentleman in extensive practice likely to give for sixpence-halfpenny a case, attended from seven to ten days! What is his diagnosis likely to be? What knowledge can he gain of the complications of primary diseases? What discrimination can he employ in the administration of his *sixpennyworth* of remedies? It is impossible to write upon the subject without feeling ineffable pity for the victims, and disgust for a system which sacrifices the health and lives of the pauper, not in an open manner, like a murderer, but surreptitiously, assassin-like, and under the pretence of affording relief.

If we extended the analysis to other parts of the country, the differences in the rates of remuneration would be found every where equally striking; and what, we ask, can be the use of a Central Commission that is incapable of removing these anomalies, and of taking the only effectual means to secure

Parlur Mattirons

tolerable medical attendance for the poor in sickness? We readily grant that many a medical officer in the worst paid districts supplies the poor with proper remedies, and at a great sacrifice devotes time to the investigation of their diseases; but, as a general rule, the medical officers cannot do anything of the kind, without bringing ruin on themselves and their families.

The poor are beginning to be aware how cheaply their lives are held. They know that the medical officers are not paid to supply them with "proper remedies." The labourer knows that the doctors are only paid *three-halfpence* a visit for attending him and his wife in their mortal ailments, and he is not slow in drawing the natural inference, which we are bound to say is correct in nineteen cases out of twenty. Is not this a most serious state of things? Is the diffusion of such knowledge—or, rather, the truth of such facts—calculated to promote a conservative feeling in the working classes, who would better bear the denial than the mockery of medical relief? If no Central Commission existed, the blame would attach to the local authorities; but the Central Commission brings the whole responsibility home to her MAJESTY'S Government, and the pauper feels, in his bitterest moments of distress, that it is by the Government that he is denied "proper medicines" and "proper advice." If the Commission were abolished, it may be a question whether any attempt should be made by legislation to provide the poor with adequately-paid medical officers; but if the Commission be continued, the refusal to interfere, the denial by the Government of a merciful regard for the feelings of the working classes in the season of distress and sickness, will tend very much to exasperate their feelings against those who ought to be their friends; and, if it do not prove fatal to the country, great in power, but greater in humanity, it must be inevitably fatal to the Government.

There are parties, we know, who, believing the population to be too numerous, consider that no sincere attempt should be made to relieve the sufferings, and thereby prolong the lives, of the poor; that they should merely be amused by the doctors, and allowed to die. Such parties would make the union medical officers the European counterpart of the Indian Thugs; who kill their victims so skilfully, that a trace of the assassin's hand can scarcely be detected; while the former, if they acted under the inspiration of the vile doctrine in question, would see the poor patient occasionally in sickness, but spend no time in studying his case, and only send him inert remedies. With such parties we cannot, of course, argue; and they are greatly mistaken if they conceive for a moment that they can find fitting agents in the ranks of the most virtuous and beneficent of professions.

MEDICAL SOCIETY OF LONDON.

Monday, May 16, 1842.

Mr. PILCHER, President.

CASES IN MIDWIFERY. — TREATMENT OF INSANITY.

MR. LINNECAR stated, that the patient whose case he had related at the last meeting of the society was in a very precarious state; the cellular membrane below the knee was sloughing. He still thought that the watery discharge from the vagina proceeded from the cavity of the uterus. There was no evidence of inflammation of the veins of the uterus.

Mr. LEESE mentioned a case somewhat similar to that of Mr. Linnecar. The patient was the wife of a butcher, and accustomed to be much upon her feet. When at the seventh month of pregnancy her legs, but particularly the left, swelled considerably, and the nymphæ became enlarged. The patient was placed in the recumbent position. Aperient medicine was administered, and oil of camphor applied to the swollen parts. The patient recovered.

Mr. LINNECAR, in answer to a question, had not tested the urine for albumen. Before confinement this secretion was scanty and dark-coloured, since then it had been copious. The patient had not been accustomed to stand, and was delicate. He had punctured the swollen parts, in consequence of the pain produced by the distention.

Mr. ELLIOTT called the attention of the society to the treatment of insanity. He said that in acute mania bordering on phrenitis, active antiphlogistic treatment was required. It was erroneous to suppose that this was not necessary, even in cases which

were of some standing. A lady, affected with "pure mania," had come under his care. The attack had been sudden; there was no hereditary taint; adversity and the unkindness of her husband had been the immediate causes of the attack. All the symptoms of phrenitis were present. Before the patient had come under his care she had lost thirty ounces of blood from the arm: he subsequently took away more blood, and applied leeches to the temples. Calomel was administered; and cold lotions, consisting of acetate of lead, muriate of ammonia, and vinegar, were applied to the head. Extensive and efficient vesication was produced, by rubbing in freely the emplastrum lyttæ with two parts of acetic acid. A perfect recovery followed the treatment. It was important to keep up the action of the blistering plaster. He administered blue pill in the latter stage of the disease. The most useful anodyne was henbane; and in order to procure it in an effective state, he cultivated the plant. The infusion was the best preparation, and this he made by infusing half an ounce of the leaves in a pint of water. Of this infusion half an ounce was given every three hours, until the desired effect was produced. Another case of a similar nature was also related: the patient was a gentleman, and the exciting cause had been embarrassment in business. A similar course of treatment was pursued—the result was similar. Mr. Elliott considered iodine of much service in maniacal affections, after mercury had been employed. The distinction he drew between insanity, conjoined with phrenitis and simple phrenitis, consisted in the fact, that in the former there were no intervals of sanity.

Mr. Proctor remarked, that in mania there existed great excitement of the brain, but that this excitement was marked by intervals. Mr. Dunstan had discovered very little trace of disease in examining the brains of one hundred individuals who had died insane; in ten there were not changes sufficient to account for the disease. The depletory treatment lowered the action of the brain, but he had seldom seen it produce a cure. The chief cause of mania was mental excitement. The nervous system was much implicated. He considered counter-irritation of much service in the treatment of insanity.

Mr. Solly thought that phrenitis was excited by external causes, and that insanity was produced by mental impressions. Mania was dependent on inflammation of the cortical substance of the brain, including the hemispherical ganglia. Antiphlogistic treatment was useful in almost every case of mania, but it had got into disrepute by having been carried too far. He had had much experience of maniacal affections, and had never examined the brain of a maniac without discovering traces of disease.

Mr. Kingdon said, that in the investigation of disease the action of the vascular system had been too exclusively considered. Insanity was often produced by phrenitis, but it might exist without it.

Dr. Theophilus Thompson observed, that his experience afforded evidence of the grey matter of the brain, including the hemispherical ganglia, being the seat of insanity. This substance was frequently the seat of changes in vascularity and consistence; but these were often overlooked, because the grey matter was seldom taken into consideration. It was important to distinguish between insanity dependent on inflammation, and that form of the disease dependent on mere irritation of the brain: in the first form, bleeding was the proper remedy; in the latter, opium should be administered.

Mr. Diamond said, that much mischief had been done by over depletion in the treatment of maniacal affections. During the last twenty years he had not used the lancet twenty times in the treatment of insanity. The cases for which he had received most credit were those in which depletion adopted by others had been carried to an injurious extent. He had remarked that all maniacal patients who had high opinions respecting their rank, wealth, or importance, became the subjects of paralysis within three years.

Mr. Dendy was surprised to hear that inflammation of the hemispherical ganglia always existed in acute mania, and that total abstinence from bleeding was recommended. He believed that the exciting cause of mania was of a metaphysical nature, but no mental emotion of any kind could exist without a physical change. It was important to deplete in acute mania.

Mr. Crisp said that it was necessary to discriminate between varieties of the disease; the cases mentioned by Mr. Elliott were different from those referred to by Mr. Diamond. Where there was excitement, it was important to deplete. He inquired if Mr. Solly had compared the hemispherical ganglia, as they were found in maniacs, with those in healthy brains.

Mr. Solly had made a practice of examining carefully the hemispherical ganglia in healthy brains. In melancholia, a disease in which the mind was almost obliterated, the hemispherical ganglia were pale, while in mania they were of a dark purple colour.

Monday, May 23.

Mr. Proctor could not agree with those gentlemen who considered insanity to be always the result of inflammation of the brain. He had seen cases of mania in which there was no evidence whatever of inflammation. There was another condition of brain which produced death in some cases of insanity, and this consisted in an exhausted state of the nervous system. We could not

quiet the excitement of this system, and it destroyed the patient.

Dr. Clutterbuck thought that if we adverted to first principles, neither the pathology nor the treatment of insanity was difficult. Insanity was a symptom of disease, and so far bore no analogy to phrenitis, which indicated an inflammatory condition of the brain; but mania often existed for a long time without affecting the general health. There would not in these cases be inflammation present, and therefore this was not necessary to the production of insanity. Inflammation, however, might, indirectly or remotely, give origin to mania. In the outset there might be signs of inflammation; these were subdued, but the mania continued. This was explained by the fact, that inflammation was a disorganising process, and left such effects on the structure of the brain as to render it incapable of performing the functions natural to it. If that portion of brain devoted to intellect were thus affected, the result was permanent insanity. In insanity our treatment was in no way to be influenced by the condition of the mind itself; this only afforded an indication of the brain being in an unsound condition, and our treatment was to be directed to this organ, and to be influenced only by the physical signs presented to us. Generally speaking, there were no marks or signs of inflammation present, why, then, should the affection be treated as an inflammatory one? If blood-letting were not useful, it was injurious. If inflammation of the brain existed, as would be indicated by the physical signs and symptoms, antiphlogistic treatment, including perhaps blood-letting, would be necessary. There was no reason, however, that remedies should be very active, because there was much mental excitement present; for the most furious delirium might exist with a state of brain directly opposed to that of inflammation. If we treated insanity on the common principles with which we treated other diseases, we should do right. Let us look to the general state of the system, and then our indications were as plain as they were in other diseases. Generally, in lunatic asylums, it was not necessary to resort to blood-letting, because the active stage of the disease was over before the patient was admitted. Our treatment should, then, be almost entirely passive. Counter-irritants he objected to, for he believed that they were calculated to do mischief; and narcotics usually did more harm than good. He saw, indeed, no rational indication for their employment; for although they might by producing sleep alter the character of the disease, they would never cure it.

Mr. Elliott objected to a discussion on chronic mania, because it was departing from the subject which he had brought under the notice of the society. He only spoke of acute mania coming on suddenly in persons of plethoric habit, and in whom there was no hereditary taint. In these cases there was a sudden outbreak, like phrenitis; and with the exception of intervals of repose, there were all the signs and symptoms of increased action, a hot skin, a full, bounding pulse, flushed face, &c. It was in these cases, when seen in their commencement, that he had found the greatest benefit from the employment of depletion, the administration of mercurials, and the application of blisters. Generally speaking, however, these measures had been used before the patients were admitted into the asylum, and always he believed with the greatest benefit. If, however, this plan had not been resorted to in the very commencement of the disease, blood might in some cases, at the end of a few days, be abstracted carefully in small quantities, and blisters and mercurials resorted to with advantage.

Mr. Diamond should never apply blisters to the head in cases of acute insanity, as this would add fuel to fire: cold should be applied to the head, and blisters to the legs and feet.

Mr. Dendy believed that there were two distinct conditions of brain present in cases of acute mania: in one the brain was full of blood, in the other it was deficient of it; in both of these states there was more or less congestion; and upon venous congestion, mainly, did he believe that mania depended. It was not in the first stages of intoxication that the symptoms of mania presented themselves. Then there might be a great brilliancy of intellect; but after this was gone, when the arterial action had subsided, and the veins became congested, mania presented itself: so in anemia of the brain, there would be more or less congestion; and in both descriptions of cases he should employ moderate bleeding to relieve the congestion.

Dr. Risdon Bennett thought that cases of acute insanity requiring blood-letting were rare. He mentioned two or three cases in which tonics and sedatives at night effected a cure.

Dr. Theophilus Thompson attributed the success of opposite modes of treatment in insanity to the opposite nature of the cases. We must be guided in our treatment by the physical signs. He eulogised the plan of treating insanity as pursued in the Glasgow Asylum, in which institution those faculties which remained healthy were brought into useful employment.

THE PROVINCE OF PHRENOLOGY.

To the Editor of The Lancet.

Sir,—Feeling sure that you cannot wish much more space occupied in your Journal by the phrenological discussion, I do not in-

tend to write at any length. Dr. Dick has been pleased to say that I take virtually the same view of the question as he does himself; there is, however, this palpable difference between us—he denies the truth of phrenology, and I do not. I only quarrel with the *application* which *some* phrenologists would make of it.

On a subject like phrenology, there must be much variety of opinion amongst phrenologists themselves; and I think, though perhaps erroneously, that a few of them are becoming very hobby-horsical. With regard to the difference between physical and mental actions, and the consequent *irresponsibility* of the former and the *responsibility* of the latter, I must beg leave to draw your attention to the forcibly-expressed opinions of Hazlitt, who thus states the matter very clearly:—

"The sword and the assassin would be equally moral and accountable agents, if they were both equally accessible to moral motives, that is, to reward and punishment, praise and blame, &c.; but they are not. This seems to be a distinction of great pith and moment. * * * * It is objected, indeed, that still both are equally necessary agents; but this appears to me to be a confusion of words. It is in vain to exhort flame not to burn, or to be angry with poison for working; and it would be equally vain to exhort men to certain actions and to resent others, if exhortation and resentment had no more effect upon them, that is, if they were really governed by the same sort of blind, physical, unreasoning, unresisting necessity."

The proper province of phrenology is to show the ingredients which form our character, and their relative proportions; but what is their intensity, how they influence each other, and what circumstances have excited and will excite them into action, it can by no means precisely determine. Did I not believe that man can err wilfully, with a clear view of right and wrong before him, and the power of choosing between the two, I should deem the punishments of our courts of justice the unnecessary tortures of the helpless victims of mal-organised brains. I am, &c.

SPECTATOR.

DOCTRINES OF SPURZHEIM.

To the Editor of THE LANCET.

SIR,—It has struck me that much of the discussion on "criminal legislation" would have been prevented, if the advocates of phrenology had stated what Dr. Spurzheim taught, that from the development of a man no positive conclusion can be derived as to the actions he will perform. Hence reflecting phrenologists never predicate *actions* but merely *tendencies*. To support the contrary doctrine, is to advance the untenable positions of fatalism; a doctrine which Spurzheim would as much thought of sanctioning as of advocating the creed of Mahomet. Phrenologists should therefore be cautious how they lead their opponents astray as regards their opinions.

Dr. Dick has, however, fallen into a striking error; for he supposes that phrenologists are as one respecting the principles of criminal legislation. Now this notion is incorrect. When, for instance, Mr. Sampson advances his opinions, he merely advances the opinion of an individual phrenologist, and not necessarily the doctrines of the school; and thus in advocating his opinions, he may support positions with which other phrenologists may disagree. Never, therefore, let Dr. Dick conclude that because one phrenologist *writes* so and so, all phrenologists necessarily *think* the same. Each phrenologist, like the advocates of other sciences, must be judged by his own merits. I am, Sir, yours respectfully,

H. B. BROOKS.

May 24, 1842.

MEMORIAL

TO

THE SENATE OF THE UNIVERSITY OF LONDON.

To the Editor of THE LANCET.

SIR,—Knowing that you have continually exerted yourself in the examination and exposure of corporate misdeeds, I have forwarded to you the inclosed memorial to the senate of the University of London, together with the correspondence between the registrar, examiners, and myself. We might have expected better things from a new institution, anxious, as it ought to be, to obtain an honourable position among the universities of Great Britain. The "regulations" state that at the examination for the M.D. degree, "any candidate may present a thesis on a subject of his own choice. If in the opinion of the examiners sufficient merit be evinced, a gold medal of the value of 10*l.* shall be given to the author of the best thesis. The examiners shall not be precluded from examining the author on the subject of his thesis." Such is the notice of the thesis in the regulations. It leaves to the candidate the choice of his subject among any of the medical sciences. I availed myself of the latitude of the "regulations," and wrote one on the generation of organised beings. This thesis was not even seen by the examiners in botany and physiology, within whose province it came, but, as I believe, by the examiners in medicine—pretty judges, forsooth, on such a subject! To have complained that injustice was done me, had the examiners in animal and vegetable physiology perused my thesis, would have been the height of folly

and absurdity; but to complain, as I do, that these examiners did not even see the thesis, is in no degree improper, the examiners in medicine not being officially (if competent as scientific men) proper judges on such a subject. But to crown all, the senate takes the examiners by the hand and says, that they have acted justly and properly in ascertaining the merits of a work on a subject with which they were *officially* unacquainted. The virtual assertion by the senate, that any one or two of the examiners are capable of examining on any or all subjects would, if fully acted on, create a pretty confusion in the affairs of the university. We shall next have the examiner in Latin or Greek settling medical and physiological questions; and he might do so with fully as great propriety as the examiners in medicine have done in my case. The senate have, in justifying the examiners, done much the same thing as a private person would do if he repeatedly went to his tailor for a joint of meat, or *vice versâ;* he would be transferred to a very proper place for him—a lunatic asylum. I need not further enlarge on the folly of the principle, that the senate of the University of London have enunciated; it is sufficiently glaring, and speaks for itself. I am, Sir, your obedient servant,

PHILIP B. AYRES.

"My Lords and Gentlemen,—The examiners of the London University having awarded no prize for the theses sent in by the candidates for the degree of doctor of medicine at the last examination, although either three or five were presented; and there having been, from what I can learn, some irregularity in their proceedings, I am tempted to memorialise you on the subject, not so much for myself, for I have had sufficient experience to be aware that the acts of public bodies are for the most part irrevocable, as for the information and benefit of future candidates who may, like myself, waste their time and energies in a hopeless scheme.

"For this reason, simply, I now make application to you to investigate the circumstances under which the above theses were examined, and their merits, or rather their want of all merit, determined.

"For my own part, and as far as my thesis is concerned, I may say that although it contained no original research, yet I flattered myself that both its plan, and some of the ideas and reasonings it contained, were original, and sufficiently proved by the facts collected from the best writers at my command. As I had not the advantages of a large library at hand, it could not contain many facts that I would otherwise have gladly introduced, and some of the statements may have been disproved by subsequent investigators. The subject was one of the most obscure functions of organised beings—their reproduction. The leading idea of the thesis arose from the great division of labour which has taken place, not only in manufactures but also in scientific subjects, causing men to follow particular branches of science, to the neglect of the remainder, and thereby rendering them unfit for the general comparison of the whole series of organised beings.

"It also occurred to me that the process of reproduction in the two great divisions of organised beings presented striking similarities, and that a careful examination of the function in the two classes would enable me to bring the whole under certain general laws equally applicable to animals and plants. This, I fondly conceived, I had done in my thesis, which took up the whole of the little leisure afforded by my practice during several months. Having consumed so much time and mental energy on its production (which was doubtless the case with the other candidates who presented theses), I certainly did not anticipate for it the treatment it has received at the hands of your examiners. Had any one of the theses received the prize, or even honorary mention, I should have bowed with submission to the decision of the examiners; but as all were among the 'rejected addresses,' I could not but imagine that they had not received a careful perusal. I am aware of the fondness of authors for their writings, but I would not be so vain as to think that mine was the most meritorious.

"Some private information, which I need not now mention, first led me to suspect that the examination of my thesis was not fairly conducted; and I now possess sufficient and authentic information to warrant me in affirming that this was the case. I therefore fearlessly assert, that the conduct of certain of the examiners and officers has been most disgraceful to the university, and that such conduct (if continued) will greatly injure it in the estimation of the public. . . . It is therefore the duty of the senate to make inquiries on the subject, and remove those officers who have acted in this unfair and disgraceful manner.

"I now proceed to the evidence on which my assertions are grounded, which will, I doubt not, be found strong and conclusive. The subject of my thesis being physiological, and including the two branches of animal and vegetable physiology, I, of course, expected that it would have been submitted to Professor Henslow and Dr. Roget, the two examiners on those subjects, who were undoubtedly the proper judges of its merits or demerits. No announcement having been made of the result of the theses by the 16th of December (more than a month after the examination), I wrote to the registrar the note marked No. 1, inquiring whether any adjudication had taken place, and to which of the examiners my thesis had been subjected for decision; at the same time I requested

the return of the copy of my thesis sent in at the examination. I received an answer from him (No. 2), dated Dec. 20, stating that the examiners had made no report on the subject, and that he regretted that he could not return the copy of the thesis. I again wrote to him on the 22nd (No. 3), requesting a more explicit reply with respect to the adjudication, and as to which of the examiners had inspected my thesis.

"I received a reply (No. 4), bearing date Dec. 23rd, stating that no prize was adjudicated; that *he did not know* which of the examiners had examined the thesis; and even if he did know, he should not feel himself at liberty to inform me, as it would sanction what he considered irregular proceedings, namely, private communications between the candidates and examiners. This reply convinced me that it was useless to expect further information from the registrar, and I therefore addressed myself to those examiners who, in my opinion, should have read my thesis, namely, Professor Henslow and Dr. Roget. I accordingly wrote to each of them, simply inquiring whether they had seen the thesis. Professor Henslow immediately replied, that no such thesis had been submitted to him (No. 6). As Dr. Roget did not reply to my note for nearly three weeks, I took the liberty of again addressing him (No. 10), fearing that he had not received my previous letter, to which I received a rather uncourteous reply (No. 11), stating that he was not an examiner for the degree of doctor of medicine, leaving me to infer that he had not seen my thesis; an inference that I believe to be correct.

"Here closes the correspondence which forms the evidence on which I found my charge of unfair conduct on the part of certain officers of the university.

"Dr. Roget, unfortunately for the examiners for the M. D. degree, in avoiding a direct answer to my question implicates them in the transaction. He permits the inference that the examiners for that degree adjudicated the merits of my thesis; but even supposing that Dr. Roget did examine my thesis, still I contend that injustice was done me in not subjecting it to Professor Henslow, the only competent judge of minute botanical details. It is sufficiently evident, however, that it was not seen even by Dr. Roget.

"The examination and adjudication of my thesis, therefore, rested with the examiners for the M. D. degree. These are the examiners in logic, moral and intellectual philosophy, medicine, surgery, and midwifery. It is not at all probable that either the examiners in logic, moral and intellectual philosophy, surgery, or midwifery, had anything to do with it; the charge, therefore, rests with the examiners in medicine; highly improper persons to adjudicate on a physiological subject.

"On a review of the evidence I have brought forward I accuse the examiners in medicine, Drs. Billing and Tweedie, with having unwarrantably read and adjudicated on my *physiological thesis;* and I call upon the senate to examine the charge, and on them to rebut the accusation, if they are able to do so.

"Finally, I petition the senate to allow the corrected copy of my thesis, sent in at the examination, to be returned to me, with a view to its publication, in order that others may judge of its merits or demerits.

"With the hope that these matters will undergo a strict examination, I subscribe myself, your obedient and humble servant,

"PHILIP B. AYRES, M.D., Lond.

"P.S.—Authentic copies of the correspondence will accompany this memorial."

1.—*Dr. Ayres to Mr. Rothman.*

"Sir,—You will oblige me by giving the diplomas I left at the university, together with the diploma of doctor of medicine, to Dr. Mackenzie, who will apply for them in my name. At the same time, I shall esteem it a favour if you will inform me what is the result of the theses sent in by several of the candidates, and among them myself. I have as yet received no official information as to the result, since, at the time Mr. Moore wrote to me, no decision had been arrived at. May I, at the same time, ask, to which of the examiners my thesis (being a physiological one) was subjected, for the decision of its merits or demerits? I am sorry that I was induced by the passage relating to the thesis in the 'regulations' to write one that occupied almost the whole of my leisure time for three or four months, and prevented my devoting that time to metaphysics and medicine; to which I may attribute my want of success at the pass examination. Had the regulations been more explicit, they would have saved me the disgrace of being placed in the second class. I am, Sir, &c.

"PH. B. AYRES, M.D.

"Thame, Dec. 16, 1841.

"P.S.—I hope you will favour me with an early reply. Perhaps you will also oblige me by returning the copy of the thesis I sent in through Dr. Mackenzie, when he applies for it and the diplomas."

2.—*Mr. Rothman to Dr. Ayres.*

"Sir,—Agreeably to your desire all your diplomas will be given to Dr. Mackenzie when he calls for them. I have received no report whatever from the examiners regarding the theses, and I conclude from this circumstance that it is not their intention to recommend any of them for the gold medal. I regret that it is not in my power to comply with your request of returning your thesis. In the first place, it is not in my hands, but in those of the examiners; and in the second,

were it deposited with me, I should not feel justified in parting with it, without a special order of the senate, as such a step would be contrary to the practice always hitherto observed in this university. I am anxious to observe, as you desire an early reply, that your letter, though dated the 16th, did not reach Somerset House till this morning, and bears the London post-mark of to-day. I remain, Sir, &c.

" R. W. ROTHMAN.

" University of London,
Dec. 20, 1841."

3.—*Dr. Ayres to Mr. Rothman.*

" Sir,—I thank you for your prompt attention to my note. Unavoidable circumstances prevented my posting it until the 18th, consequently you received it on Monday, the 20th. I think that, at least, the examiners should formally announce their determination, since until such announcement be made known to us we remain in uncertainty as to the result, and under such circumstances I do not like to trust to inference.

" I expected to hear that you had not the power to return the copies of the theses. This must remain for the decision of the senate, to whom it is my intention to make application.

" You have omitted to answer the most important question in my note; viz. 'to which of the examiners my thesis (being a physiological one) was subjected for the decision of its merits or demerits!' I therefore repeat the question, in order that I may apply to the examiners themselves on the subject.

" I apprehend that Dr. Roget and Professor Henslow are the examiners on whom the decision of my thesis will fall. I shall feel obliged by your giving me their respective addresses. I am, Sir, &c.

" PH. B. AYRES, M.D.

" Thame, Dec. 22, 1841."

4.—*Mr. Rothman to Dr. Ayres.*

" Sir,—I wish to explain that the examiners have already made their report to the senate relative to the late examination for the degree of M.D. That report does not recommend the award of any medal for a thesis; and, consequently, no such medal will be awarded by the senate on this occasion.

" You must excuse my answering your question, 'to which of the examiners your thesis was subjected for decision on its merits.' In the first place, I really am ignorant on this point; but were it otherwise, I do not feel that I should be justified in complying with this request. I must also decline sending you the addresses of Dr. Roget and Professor Henslow, as by so doing I should sanction proceedings which I consider irregular, namely, private communications between the candidates and the examiners. I am, Sir, &c.

" R. W. ROTHMAN.

" University of London,
Dec. 23, 1841."

5.—*Dr. Ayres to Dr. Roget and Professor Henslow, respectively.**

" Sir,—You would confer a great obligation on me by informing me whether a thesis presented at the late M.D. examination in the University of London, entitled 'An Essay on the Generation of Organised Beings,' was subjected to your scrutiny. An early reply will oblige your obedient servant,

" PH. B. AYRES, M.D.

" Thame, Oxon, Jan. 2, 1842."

6.—*Prof. Henslow to Dr. Ayres.*

" Sir,—The curator of the Botanic Garden, Cambridge, has forwarded to me a letter addressed to him, which he supposed you intended for me. I never had the essay you allude to submitted to me as an examiner of the London University. My department is strictly botanical. Yours faithfully,

" J. S. HENSLOW.

" Hitcham, Bildeston, Suffolk,
Jan. 8, 1842."

(This is a mistake; the letter was sent to Professor Henslow, under cover to the curator of the garden, Cambridge.)

7, 8, 9.—In reply to an inquiry dated Jan. 9th, 1842, Mr. Rothman informed Dr. Ayres on the 12th that a meeting of the senate of the university was fixed for Wednesday, the 19th January, but as Dr. Ayres had received no answer from Dr. Roget, he did not make use of this information.

10.—*Dr. Ayres to Dr. Roget.*

" Sir,—Supposing that you did not receive a note bearing date January 2nd, 1842, which I directed to you in Bernard-street, I beg to be permitted to repeat the question therein contained, whether a thesis entitled 'An Essay on the Generation of Organised Beings' was subjected to your scrutiny? Will you be so kind as to favour me with an answer at your earliest convenience. I am, Sir, &c.

" PH. B. AYRES, M.D.

" Thame, Oxon, Jan. 27, 1842."

11.—*Dr. Roget to Dr. Ayres.*

" Sir,—I did not think it necessary to write an answer to your first letter, because I imagined that, before you could have received that answer, you would have discovered, on referring to the regulations, that I am not appointed an examiner for the degree of doctor in medicine; and also that you would have felt, on reflection, that the proper person to whom you ought to apply for

* A copy was sent to each examiner.

information relative to the examinations is the *registrar* and not the *examiners*. Your obedient servant,

"P. M. ROGET.

"Bernard-street, London,
Jan. 28, 1842."

Dr. Ayres was now informed by Mr. Rothman on March 11th, that the next meeting of the senate would be held on Wednesday, the 6th of April, when the memorial, together with a copy of the correspondence, was accordingly sent in, and the following was the reply of the senate:—

Mr. Rothman to Dr. Ayres.

"Sir,—The senate of this university has taken into consideration the statement made by you relative to the decision on the thesis sent in by you at the last examination for the degree of M.D.; and I am directed to inform you that the examiners do not appear to the senate to have acted in opposition either to the spirit or the letter of the regulations. I remain, Sir, &c.

"R. W. ROTHMAN, Registrar.

"University of London, April 7, 1842."

"P.S.—Circumstances prevented me yesterday from consulting the senate on the return of your thesis; but I shall not fail to do so at the next meeting, and to apprise you of the result."

ELECTIONS AT THE EDINBURGH ROYAL INFIRMARY.

To the Editor of THE LANCET.

SIR,—Knowing your readiness to correct all abuses, I beg leave to transmit to you a few facts regarding the manner in which the various officers of the Edinburgh Royal Infirmary are usually elected. To commence, then, with the election of physicians. Upon a vacancy occurring lately, on the resignation of Dr. W. Thomson, an advertisement was widely circulated requesting candidates (who were required to be fellows of one of the colleges) to send in their testimonials before a certain date; in consequence of which notice Drs. Cormack, Andrews, A. Wood, Marr, Paterson, &c., took all possible pains to get the best possible characters printed and circulated in the shortest space of time. To the amazement of all who were not previously conversant with the usual proceedings of the managers, Dr. G. Paterson was elected. Now, although Dr. P. is a very amiable man, and a very fair physician, there was nothing in his testimonials that could entitle him to compete with Drs. Cormack or Andrews; and upon an inquiry being made into the causes of this election, it was stated that preference was always given to those who had previously been resident clerks, an office formerly held by Dr. Paterson. From this answer it was clear that it was the intention of the managers to elect Dr. P., at all hazards, and against any candidates, however excellent their certificates might be, unless, perhaps, some rival antique clerk might come forward with equal claims to Dr. P.

From this statement we should be naturally led to suppose that the managers were particularly cautious in the selection of their clerks. Such, however, unfortunately is far from being the case; with the exception of Mr. M. and Dr. D., the clerks of Mr. Syme and Dr. Henderson, these offices are now filled up in a deplorably inefficient manner, and yet these clerks (almost always sons or apprentices of some of the managers) are at some future period to be thrust into that noble institution in preference to far superior men, who, not having the fortune (misfortune?) of being connected with the managers, are thus excluded from any future chance of getting appointed medical officers to the Royal Infirmary.

As a slight illustration of the state of medical incapacity of these favoured young gentlemen during the last two years, I may observe that in 1840, three out of the six resident clerks were rejected for either their first or second examination, and last year one of them was put back for not being able to translate a simple passage from Cicero "De Natura Deorum." Is it true that any of the medical managers charge their apprentices *a higher fee than ordinary, for the use of their influence in getting them elected clerks*? If it is not, why will they not allow the clerkships to be decided by a fair and open examination? Or why will they not condescend to inform the disappointed candidates upon which grounds the preference was given to the successful one?

Much might be said of their recent election of a pathological clerk and governor, but upon this point I will not at present trouble you with any observation. I remain, Sir, yours,

PHILALETHES.

May, 1842.

TESTIMONIAL TO MR. GUTHRIE.

THE committee of officers of the medical department of the army, appointed for the purpose of expressing to Mr. Guthrie their sense of the kindness and liberality with which he had placed his lectures and hospital instructions at their service for many years, delivered to him on Tuesday, the 10th of May, a service of plate, bearing the following inscription:—

"To G. J. GUTHRIE, Esq., F.R.S., &c.

"This service of plate has been presented by three hundred officers of the medical department of the army, the companions of his

early military service, or the pupils of his instruction.

"They desire to record by it their high sense of his liberal and distinguished conduct on every occasion, as well as to express their sincere affection and esteem.

"London, April, 1842."

ROYAL COLLEGE OF SURGEONS IN LONDON.

List of gentlemen admitted members on Friday, May 20, 1842:—Edward Neve Sison; John Southern; James Douglas; William Grant Eaststaff; Nathaniel Montefiore; Michael Hare; Charles Gibson; Arthur Browne Steele; Henry Thomas Berry; Edward Pye; Peter Brotherston; Arthur Taylor; Charles Robinson; James Rowlands. Admitted Monday, May 23, Octavian Royle; Charles Price Symonds; Alfred George Field; William Malichi Burke; Major Ainger; John Jeffes Sparham; James Green; Alfred Anderson; Henry Uwins; Francis Bryant Pearce; James Thomson Waller; George Augustus Shelton; John Ward; Edward Allen.

BOOKS RECEIVED.

An Investigation of the Present Unsatisfactory and Defective State of Vaccination; and the several Expedients proposed for Removing the now acknowledged Defects of the Jennerian Practice. In Letters, addressed to Dr. George Gregory, Small-Pox Hospital, London. By Thomas Brown, formerly of Musselburgh. Edinburgh: Maclachlan and Stewart. 1842. Pp. 139.

An Inquiry into the Nature and Causes of Epilepsy; with the Function of the Spleen, and the Use of the Thyroid Body, &c. By John Jackson, M.R.C.S.L. London: Whittaker. 1842. Pp. 107.

TO CORRESPONDENTS.

Glasgow.—(*From a Correspondent.*)—Within the last few years numerous friendly societies have been established in Glasgow, the most prominent of which is a branch of the "Manchester Society of Odd-Fellows," who have succeeded in forming many lodges, and, as offshoots from these, we have, also, "Druidical," "Forresters," and others. Each of these societies has a surgeon, and it might be supposed, from their great and increasing numbers, that the emoluments of their professional attendants would correspond. Instead of this, however, being the case, the medical practitioner engaged by each of the societies is paid (What will the profession in England say of this?) *the very handsome sum* of 2s. 6d. a head, for attendance and medicine for a whole year; and the Faculty of Physicians and Surgeons, although they are bound, by their charter, to uphold the dignity of the profession, have heretofore allowed this extraordinary and disreputable system to be carried on, to the injury of the character of their medical brethren. It is to be hoped, however, that when this reaches the eye of the learned and respected President of Faculty, he will take the necessary steps to vindicate the honour and rights of the profession. Should he fail to do so, there is every reason to be assured, from the spirit of indignation and disgust prevailing in this quarter, that active and immediate measures will be adopted, as have been done in other parts of Scotland, to put an end to the itch-bitten practitioners.—Gorbals, Glasgow, May 21, 1842.

A Constant Reader.—The licentiate cannot recover at law a debt made in town if he have the country licence only. Nor will the payment of the four guineas extra legalise the claim.

C. M. E.—There is not before Parliament any Medical Reform Bill, either of Sir James Graham or any other member: we do not therefore insert the letter. The alleged plan is only gossip.

A Licentiate (Stratton).—Address Robert Upton, Esq., solicitor to the company, Apothecaries' Hall, London.

We cannot recommend *Z* as to the course which he should adopt, but the calumny which has been circulated against him by his brother practitioner is clearly actionable, and *Z* might recover damages on account of it in a court of law.

M. R. C. S. L.—If precisely the same evidence were applicable in all the cases, the party was not strictly justifiable in paying eight fees in the one case, nor two in the other. The payment is made for attendance and evidence. There were not eight attendances, we presume. The witness could not recover at law *any* fee, unless he had first received the proper order to attend.

A very Old Subscriber.—We know not. Dr. Southwood Smith was a shareholder in the concern, and perhaps could inform our correspondent.

Mr. Clarkson.—Our correspondent gives us no information relative to the supposed cause of the disease. It may arise from anxiety in business, dyspepsia, disease of the heart, &c. Mr. C. should entrust his case to his medical attendant.

Communications have been received from *Dr. Clay; Dr. Scoffern; Mr. Allen; G. A.; Mr. Davis.*

Errata.—Dr. Budd's paper, on cancer, p. 266, last Lancet, was read before the *Bristol* not the *British* Medical Society; and at p. 269, col. 2, line 34, in the sentence, "He might as well have argued that there is no essential difference between the flesh of an animal and the parenchyma of a plant, for this, too, is made up of *small* nucleated cells and fibres,"—the word *small* should have been printed *similar*.